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Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission
Standards and Corporate Average Fuel Economy Standards

Joint Public Hearing
Environmental Protection Agency and National Highway Traffic Safety Administration
Docket No. EPA-HQ-OAR-2009-0472/NHTSA-2009-0059
Detroit, October 21, 2009

Thank you for the opportunity to testify today on the joint proposed rule. My name is Luke Tonachel. I am a vehicles analyst with Natural Resources Defense Council's Air and Energy Program. I represent NRDC and its 1.2 million members and activists in support of efforts under the National Program to set standards for global warming pollution from new cars and light trucks beginning in model year 2012.

NRDC applauds the creation of the National Program. The Program is a historic step forward for protecting the environment and helping consumers save money at the pump. It secures the benefit of the CA vehicle emissions program while also giving consumers more clean vehicle choices.

The Program represents a path forward on new vehicle standards that is clearly a win for automakers, their workers and the states. It is good for automakers because it gives them certainty and lays the foundation for them to be more sustainable businesses in a future world of volatile fuel prices and intensifying global warming. It is good for autoworkers because a stronger industry means more, better-paying jobs. The program is also good for the states because it preserves their right to act to protect their local interests and citizens and it upholds their tremendous value as laboratories for clean vehicle policy.

The joint proposal establishes an important policy partnership by aligning the fuel-conservation directive of EPCA with the pollution and health protections of the Clean Air Act (CAA). The Supreme Court ruled, in *Massachusetts vs. EPA*, that the CAA is the appropriate law for controlling carbon pollution, and the CAA authority brings new and important perspectives to standards that reduce vehicle carbon emissions. In addition to having health and welfare as primary drivers of the standards, the CAA provides for technology forcing standards and it includes the flexibility to set standards over longer time frames. Unlike EPCA, which limits NHTSA to setting standards just 5 years into the future, the CAA allows EPA to set longer-term standards based on advanced, not just incremental, technologies. This approach increases regulatory certainty for automakers and enables them to more effectively plan new technology in a strategic manner.

While this proposal shows real progress to fulfill the goals of the National Program there are some aspects of the proposal that need strengthening in order to deliver on the promised greenhouse gas (GHG) reduction and oil saving benefits. Specifically, there are

three top priority structural issues that need to be addressed: First, a backstop to prevent significant shifts to larger, more polluting vehicles; second, full fuel cycle emissions accounting for electric and hydrogen fueled vehicles; and third, adjustments to avoid windfalls from early credits. NRDC is also concerned with some of the proposed cost assumptions, such as the social cost of carbon, which we believe is systematically biased to an inappropriately low value. I will be working with the NRDC Climate Center's Chief Economist to provide extensive remarks on the critical cost assumptions in our written comments. In my remaining comments today I will briefly describe the structural issues in greater detail.

1. "Backstop" standards are necessary to ensure environmental objectives are met.

A key missing piece of the program design is what is known as a "backstop" to ensure that stated environmental benefits of the program are actually achieved. In the proposal, the agencies recognize that attribute-based standards do not guarantee that a specific fleetwide fuel economy and GHG emission levels will be achieved. The achieved levels predicted by the agencies is a function of the sales forecast applied to each manufacturer. For model year (MY) 2016, to reach a fleetwide average of 250 g/mi, individual car and truck standards are set assuming a specific car/truck sales split. However, this split may not occur if the automakers shift their product mix to more light trucks or if they intentionally change the design of their vehicles to prevent classification as a car. This is of particular concern since starting in MY 2011, 2WD SUVs will be reclassified as cars and this could potentially increase the car portion to 60% but production of 2WD SUVs is far from certain. To avoid the reclassification, automakers could severely cut back their 2WD SUV offerings.

To prevent intentional and unintentional market shifts from undermining the environmental and oil savings benefits of the Program, we recommend EPA and NHTSA adopt backstop standards specific to each manufacturer that will prevent automakers from deviating too far from their expected reduction trajectories. Separate backstop standards should be set for each manufacturer so they are accountable for their own actions. If a manufacturer exceeds its backstop, then the manufacturer should incur a credit deficit (expressed in megagrams or tons) and be required to eliminate the deficit within three years.

2. Treating Advanced Technology Vehicles as "Zero" Emissions Undermines Pollution and Technology Benefits of Program

EPA should reconsider the emissions rates and credit multipliers proposed for vehicles operating on grid electricity. EPA's proposal that electric-drive vehicles be treated as "zero emissions" and given credit multipliers of up to 2.0, will undermine the emission benefits of the program and will slow the deployment of conventional vehicle emission reduction technologies into the fleet.

To illustrate our concerns, we have estimated the impact of the EPA proposal on Nissan's compliance strategy. Nissan has indicated that they could produce at least 100,000 Leaf electric cars annually by MY 2016, which is about 10% of their expected overall car sales. If the EVs are assigned a 0 g/mi emission rate and a 2.0 multiplier, we estimate that

the Nissan's gasoline car fleet would average about 8 mpg lower fuel economy than if Nissan did not produce any EVs, about 31.5 vs. 39.5 mpg. That is, Nissan would have to do very little, if anything to improve the performance of their car fleet!

NRDC believes the emission scoring for all vehicles should be based on their true full fuel cycle emission impacts. Electric-drive vehicles, such as plug-in hybrid electric vehicles, battery electric vehicles and hydrogen fuel cell vehicles, have in reality non-zero emissions rate due to the upstream production and transmission of their fuel source, electricity or hydrogen. For electricity, we recommend that the emission scoring should be based on the vehicle's specific efficiency test results in kWh/mile multiplied by a national grid emissions factor in gCO₂e/kWh. For plug-in hybrid electric vehicles, which use a combination of electricity and gasoline fuel, the emission rate should be a weighted average of the electric miles emissions rate and gasoline miles emissions rate using an electric-drive utility factor.

A similar approach should be applied to hydrogen fuel cells and hydrogen internal combustion engine vehicles with a gCO₂e/kg of hydrogen factor applied to the propulsion efficiency.

3. Early Credits Should Only Be Awarded for Real and Surplus Emissions Reductions, Eliminating Windfalls that Undermine Pollution and Oil Savings Benefits

NRDC concurs with EPA's overall objective to ensure that early credit programs result in "real world" emission reductions that are "actual, surplus". Unfortunately, it is clear that Pathways 1 and 2 do not meet the intent of the Agency. This is because in model year 2009 (and possibly model year 2010) the CAFE standards result in a lower emission rate than the California program's GHG standards. The design of Pathways 1 and 2 allow automakers to accrue credits simply by complying with the CAFE program.

To eliminate this "windfall" credit opportunity, NRDC recommends that the national baseline for 2009 be set at the GHG level which results from complying with the CAFE standards. While EPA's proposals to prohibit the trading of early credits from MY 2009 between firms, to exclude FFV credits from the early credit program and to allow early credits to remain eligible for carry-forward for no more than five years mitigate the problem, they do not fully eliminate windfall credit generation.

Conclusion

The joint proposal is a historic step forward but some aspects need strengthening in order to deliver the promised GHG and oil savings benefits. In our written comments to the proposal we will expand on the backstop, alternative fuel vehicle greenhouse gas accounting, and early credits. The written comments will also address important economic assumptions such as the social cost of carbon and the methodologies used to determine its value.

Thank you.