

AEI-Brookings Institute (Lutter and Kravitz) raised concerns relating to many of the analytic assumptions used in the PEA and discussed in the NPRM.

Environmental and consumer advocacy groups commenting on the proposal included Public Citizen, Center for Auto Safety, the Union of Concerned Scientists, the Natural Resource Defense Council, the Sierra Club, 20/20 Vision, U.S. Public Interest Research Group, Environmental Defense, the Alliance to Save Energy and the American Council for an Energy-Efficient Economy.

In general, these groups expressed dismay that the nature of the CAFE program, and its heavy reliance on the confidential technological, financial and product abilities of motor vehicle makers, preclude access to the data upon which much of the CAFE analysis is based. These groups contend that basing CAFE standards on the manufacturers' product plans unduly limits the agency to conducting passive rulemakings that neither force the companies to alter course nor advances the nation's longer-term energy needs. They also contend that technologies are available to manufacturers to enhance the fuel economy performance of their fleet. Many of these groups offered suggestions for the upcoming notice that the agency intends to publish seeking comment on potential reforms within current statutory authority.

Many automobile manufacturers and their trade associations also commented on the proposal. None took issue directly with the agency's decision to establish light truck CAFE standards over a period of model years. However, many took issue with specifics of the agency's analytic approach and particular assumptions built into both the technological and economic analyses used. The companies generally, but not universally, suggested that the proposed standards are challenging, but achievable. Most of the companies argued that the agency did not properly account for technological and market risks that could render the standards infeasible.

Of those who sell light trucks in the U.S. market, DaimlerChrysler, Ford and General Motors each have approximately 25 percent market share, and the remaining companies have the rest. DaimlerChrysler, whose projected CAFE levels were the highest of the three, did not take issue with any particulars in the agency's analysis of its capabilities. However, DaimlerChrysler raised concerns relating to the agency's general analytic approach and the company's view that the agency did not adequately consider the risk of

deterioration in the projections. To account for that risk, DaimlerChrysler urged the agency to reduce its CAFE proposals to 20.9 mpg for MY 2005, 21.1 mpg for MY 2006 and 21.5 mpg for MY 2007.

Ford's comments indicated that the company viewed NHTSA's proposal as technologically challenging. Like DaimlerChrysler, Ford raised concerns with the agency's general analytic approach and argued that the agency had underestimated the lead time necessary to incorporate fuel economy improvements in vehicles, as well as the difficulties of introducing new technologies across a high volume fleet. Nonetheless, Ford indicated that it was committed to taking additional actions beyond those it already planned to achieve the "difficult" standards as proposed.

General Motors submitted the most extensive comments, challenging many of the agency's assumptions and arguing that the agency had overestimated that company's ability to achieve the proposed CAFE levels. General Motors pointed out computational errors and lead-time considerations that, it contended, render our proposal technologically infeasible and economically impracticable. We will discuss the various issues raised by General Motors and other manufacturers more fully below.

While the above discussion very briefly describes the comments submitted by the various interested parties, the following summary sets forth the comments by topic. In some cases, we have provided or summarized the agency's response in this section. In other cases, our response to the comments is embedded in the more detailed analysis of the technological and economic issues discussed later in this document.

A. Technological Comments

1. Relationship Between Technology Analyses

General Motors commented that the "Stage" and Volpe analyses consider different technologies. General Motors said that it believed that due to the differences in the two analyses, there was a substantial gap in the rulemaking record. General Motors also stated that NHTSA has neither presented the costs of the improvements that it used in the Stage analysis nor vouched for the feasibility of the technology applications used in the Volpe analysis.

2. Technology Application Algorithm Methodology

General Motors stated that Volpe's algorithm suffers from the following methodological limitations: (1) Application of technologies to all trucklines in a single model year, (2) the addition and subsequent removal of some technologies, (3) the application of aerodynamic drag reduction to only some versions of a given nameplate.

3. Lead Time

The Alliance of Automobile Manufacturers (Alliance), Ford Motor Company (Ford), and General Motors stated that NHTSA's analysis inadequately considered lead-time requirements for adding existing fuel technologies and for developing new technologies, and overestimated the number of vehicle models to which technologies could be added in a single model year. General Motors and Ford submitted confidential comments responding to the particular technological advances contemplated in the NPRM. General Motors, Ford, DaimlerChrysler and the Alliance expressed concern with the simultaneous application of some technologies to all of a given manufacturer's products and stated that technologies cannot be incorporated in every vehicle at the same time. General Motors and DaimlerChrysler further claimed that NHTSA paid little attention to product life cycles or the need for lead-time. The National Automobile Dealers Association (NADA) commented that any CAFE standard set too high might prematurely force technological changes, resulting in decreased vehicle performance, reliability, and/or marketability. Honda asserted that development lead-time is essential to enhancing fuel economy without degrading safety. Union of Concerned Scientists contended that automobile manufacturers could incorporate fuel-efficient technology into vehicles faster than assumed in the NHTSA analysis.

We have reviewed our analysis in light of these comments and, where appropriate, have incorporated additional lead time into the analysis by applying some technologies in MYs 2006 or 2007, rather than in MY 2005. The establishment of CAFE standards over a period of years allows us both to ensure that the standards are reasonably within the industry's projected capabilities without incurring adverse economic and safety consequences, and to encourage progress in technological advances to enhance fuel economy