

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON. D.C. 20503

ADMINISTRATOR OFFICE OF INFORMATION AND REGULATORY AFFAIRS FEB 2 4 2003

The Honorable Mary Hutzler Director, Office of Integrated Analysis and Forecasting Energy Information Administration U.S. Department of Energy 1000 Independence Avenue, **S**W Washington, DC 20585

Dear Ms. Hutzler:

Energy modeling studies conducted by the Energy Information Administration (EIA) provide useful information to policy analysts, including those at the Office of Management and Budget (OMB). The purpose of this letter is to raise a technical concern about EIA's National Energy Modeling System (NEMS).

NEMS is one of the most detailed and sophisticated energy models currently available, yet it appears that it may not adequately reflect the potential for new vehicle technologies. In particular, OMB suggests that EIA reassess the technological advances associated with hybrid-electric and diesel-powered vehicles, as well as the market forces and policy developments that together will influence the future fleet of passenger vehicles in the United States over the next 20 years.

Current EIA forecasts indicate that hybrid-electric and diesel vehicles will have limited penetration in the passenger vehicle market over the next 20 years. This stands in contrast to views expressed by some industry observers, including those within the industry and environmental advocacy groups. OMB believes that this inconsistency may be due partly to the structure of and inputs to the NEMS model.

OMB is not convinced that current model inputs accurately indicate the state-ofthe-art of these technologies, which are now in production or planning stages in the United States, Europe and Japan. Relevant parameters that warrant further examination include technology cost, energy efficiency, vehicle performance, engineering tradeoffs among various vehicle characteristics, and the potential for changes in these parameters over time due to engineering and manufacturing improvements. Furthermore, OMB urges EIA to review the methods used to predict the impact of hybrid-electric and diesel technologies on the passenger vehicle market. First, consumers will consider these technologies within the context of a variety of other factors, including vehicle performance, payload capacity, towing capabilities, and vehicle size. Development of a realistic economic model of consumer vehicle choice is clearly a challenging task, but improved data and methods can help NEMS produce more reliable predictions.

Second, it is especially important to consider how regulatory developments will affect manufacturer decisions. For example, the NEMS model generally assumes that vehicle manufacturers will use only "conventional technologies" to comply with Corporate Average Fuel Economy standards, yet hybrid-electric and diesel technologies are not considered as "conventional technologies" within the model. We believe, however, that manufacturers are actively pursuing hybrid-electric and diesel vehicles as part of their strategies to respond to the growing regulatory demands for fuel economy improvement, though significant penetration prior to 2008 is unlikely.

In addition, we note that various consumer tax credits may be considered in the future to promote advanced diesel engines as well as hybrids. The NEMS model may be sought to provide useful estimates of the policy impacts.

Based on recent discussions, we are aware that EIA has taken significant steps to refine the NEMS model, including, for example, a more realistic treatment of certain types of hybrid-electric technologies. This is a sensible first step, and we urge EIA to continue these efforts and to improve the analytical methods used to predict the market penetration of these technologies. It is important that the NEMS model capture a range of plausible views of where the vehicle market is headed. We encourage you to take additional steps to ensure that the analytic results from the NEMS model are fully consistent with OMB and Department of Energy information quality guidelines. My staff stands ready to assist you in this important work, and we appreciate the remarkable degree of professionalism and responsiveness that you have demonstrated in our previous communications.

Sincerely,

John D. Graham, Ph.D. Administrator Office of Information and Regulatory Affairs