

Status of Alternative Fuel and Alternative Fueled Vehicle Markets

According to the EIA, the number of AFVs on the road has more than doubled since EPAct's passage in 1992. See *Energy Data Book* at 9-3 (Table 9.1), and EIA, *Alternatives to Traditional Transportation Fuels 2000* Table 1 (Sept. 2002) [hereinafter *Transportation Fuels 2000*] (www.eia.doe.gov/fuelalternate.html). As of 2002, EIA estimates that AFVs number slightly more than a half million vehicles, comprising a small fraction of the total U.S. vehicle stock. *Id.* Of the forecasted 2002 total, approximately 281,000 will be fueled by liquefied petroleum gas (propane); 126,000 will be fueled by compressed natural gas; 5,900 will be fueled by M85 (a blend of 85 percent methanol and 15 percent gasoline); 82,500 will be fueled by E85 (a blend of 85 percent ethanol and 15 percent gasoline); and almost 20,000 will be fueled by electricity. The remaining quantity of AFVs consists of a very small number of vehicles fueled by liquefied natural gas, M100 (100 percent methanol), and E100 (100 percent ethanol). *Id.* DOE estimates that approximately 20,000–25,000 new AFVs are acquired annually as a result of the Federal fleet requirements under section 303 of EPAct and the State and Alternative Fuel Provider Fleet Programs found in sections 501 and 507(o).

In addition to the vehicles described above, EIA estimates that by 2000 there were approximately 2.6 million flexible fueled vehicles (FFVs) on U.S. roads capable of operating on ethanol blends of E85. *Transportation Fuels 2000* at Table 1. An FFV is "any motor vehicle engineered and designed to be operated on any mixture of two or more different fuels." 10 CFR 490.2. The number of FFVs is expected to grow significantly in future years as automakers continue to sell hundreds of thousands of these vehicles each year. EIA does not count most of these vehicles in its AFV figures above since these vehicles include cars and light trucks owned by non-fleet owners, who for the most part are not expected at this time to use ethanol in their vehicles. These vehicles, however, could use ethanol if the infrastructure becomes more widely available and fuel supplies are offered at a competitive price.

When EPAct was enacted in 1992, EIA estimated that total alternative fuel and replacement fuel use accounted for approximately 1.6 percent of total motor fuel consumption. This figure rose quickly to 2.2 percent in 1993 largely as a result of requirements under the Clean

Air Act Amendments of 1990, which required the use of oxygenated and reformulated fuels. EIA has projected that, for 2002, the annual consumption of alternative fuels in alternative fuel vehicles will reach the equivalent of approximately 294 million gasoline gallons. Factored together with the use of replacement fuels such as ethanol and MTBE, the total amount of replacement fuel and alternative fuel consumption will displace the equivalent of approximately 4 billion gallons of gasoline. While encouraging, this figure represents only a small part (2.8 percent) of total 2002 on-road motor vehicle fuel consumption. Thus, despite the efforts of the past decade and significant improvements in the state of alternative fuel technology, alternative and replacement fuel use has grown relatively little.

II. Previous Opportunities for Public Comment

Pursuant to the rulemaking process set out in sections 507(c)–(g) of EPAct, DOE issued an advanced notice of proposed rulemaking (ANOPR) and held a series of stakeholder workshops to discuss various options open to it for implementing a private and local government fleet program and in general how to encourage increased use of replacement fuel. Commenters also were asked to provide input on the replacement fuel goals contained in EPAct. The comments and public statements DOE received have informed the determination proposed today. The sections below describe the process used to solicit information, the different proposals made, and the input received. DOE notes that neither EarthJustice nor the other entities it represented in the lawsuit in *Center for Biological Diversity v. Abraham* filed written comments or provided testimony in response to the opportunities for public comment described below.

A. 1998 Advanced Notice of Proposed Rulemaking

On April 17, 1998, DOE published in the **Federal Register** an ANOPR stating that DOE was beginning its process for determining whether to promulgate a rule imposing possible AFV acquisition requirements on private and local government fleets. See 63 FR 19372. Accordingly, DOE requested comments on a number of issues potentially relating to such a rule, arising from section 507(g) of EPAct, as well as relating to possible alternative fuel requirements for urban transit buses under section 507(k). In May and June of 1998, DOE held three public hearings in Minneapolis, MN; Los Angeles, CA;

and Washington, DC. More than 110 interested parties responded by providing written and verbal comments.

The ANOPR requested comments on 23 questions within three broad areas: replacement fuel goals, fleet requirements, and urban transit buses. Many of the comments expressed during the public workshops included common themes and overlap among these three areas. Information related to the ANOPR and this rulemaking, in general, is located on the World Wide Web at http://www.ott.doe.gov/epact/private_fleets.shtml.

Discussion of Replacement Fuel Goals and Fleet Requirements

More than 40 commenters addressed the question whether the goal of replacing 30 percent of the Nation's motor fuel by 2010 is achievable. Commenters also identified likely problems in achieving this goal. Less than half of the commenters who explicitly addressed this question regarded the goal as unachievable. Many of the commenters considered the goal unachievable under the then-present economic conditions, and many offered suggestions as to what changes would be required to make the goal feasible. Commenters were in general agreement that the lack of alternative fuel infrastructure, low petroleum fuel prices, and various limitations on AFV availability were key barriers to achievement of EPAct's 30 percent petroleum replacement goal and implementation of any new fleet rules. Many commenters cited the lack of an alternative fuel infrastructure as a significant barrier. One commenter said public access to most existing natural gas refueling sites in his area is either restricted or prohibited. Another commenter said supplies of alternative fuels themselves were inadequate at present.

Two commenters pointed to the low prices of petroleum-derived fuels as an impediment to alternative fuel implementation. One commenter said that low petroleum prices implied that AFV fleet operators might never see a return on their investment. A related comment, noted that installation of an alternative fuel infrastructure could be a financial burden for small and independent fuel retailers and could be unfair to them.

The cost of AFVs and the lack of selection among AFVs were mentioned by a number of commenters. Several commenters also mentioned that it was difficult to lease AFVs or acquire certified conversions. Two commenters said incremental costs of AFVs could