

that would allow the carrier to satisfy the requirements of each of the several regulatory bodies.

AN ALCOHOL FUELS PROSPECTIVE: THE NATIONAL ALCOHOL FUELS, Edward J. Bentz, Jr. Executive Director
National Alcohol Fuels Commission

INTRODUCTION

On July 18, 1979 the National Alcohol Fuels Commission, created by the Surface Transportation Act of 1978, held its first meeting. At the first meeting - open to the public - an organizational framework and work plan were adopted. That work plan attempts to answer the following basic questions enumerated in the enabling legislation creating the Commission: Why study alcohol fuels? What can alcohol fuels provide the nation - in both short and the long term? When will they be available? How much will they cost? What is their relationship with other synthetic fuels and conventional fuels? What current or new technologies hold promise for alcohol fuel development? What has been preventing or impeding their introduction into the fuel mix to other markets? What programs or policies has the Federal government created to realize their potential commercialization? What programs or policies should the Federal government institute to rapidly catalyze the commercialization of these fuels in the most efficient and timely manner? ... and finally, what is the long and short term potential for alcohol fuels to displace foreign crude and promote domestic economic benefit?

MEMBERSHIP

Six U.S. Senators, six U.S. Representatives, and 7 private citizens comprise the 19 member Commission. The Senate members were appointed by the President Pro Tempore. The House members were appointed by the Speaker of the House. The Congressional delegates to the Commission were appointed from the respective committees on appropriations, agriculture, and energy. Senator Birch Bayh (D-Ind.) chairs the Commission. Representative Robert A. Roe (D-N.J.) serves as Vice Chairman. The seven public members were appointed by President Carter and formally inaugurated on June 27, 1979 at a White House ceremony conducted by Vice President Mondale.

MANDATE (from enabling legislation P.L. 95-599
Section 170)

SECTION 170(2) reads

"The Commission shall make a full and complete investigation and study of the long- and short-term potential for alcohol fuels, from biomass (including but not limited to animal, crop and wood waste, municipal and industrial waste, sewage sludge, and oceanic and terrestrial crops) and coal, to contribute to meeting the Nation's energy needs. It shall take into consideration the technical, economic, legal, environmental, and social factors associated with the production, manufacture, distribution, and use of such fuels. It will evaluate the costs and benefits of alternative feedstocks and their possible end uses, and analyze the feasibility and desirability of converting these resources to alcohol fuels. Based on such study it shall recommend those policies, and their attendant costs and benefits, most likely to minimize our dependence on petroleum, insure adequate energy supplies, and contribute to

the economic health of the Nation."

SECTION 170(c) reads:

Such report shall include the Commission's findings and recommendations with respect to --

1. The long- and short-term potential of alcohol fuels contributing to domestic energy supply.
2. The relative costs and benefits of developing alcohol fuels from alternative feedstocks, taking into account technical, economic, legal, competitive, environmental, and social factors associated with their production, distribution, and use; their most appropriate end uses; and a recommended time frame for their introduction into the Nation's energy mix.
3. The existing policies and programs of the Federal Government which affect the development of such alternative fuels; and
4. New Policies and programs required to develop alcohol fuels from coal and alcohol and other fuels from the biomass to meet the Nation's projected short-term and long-term energy needs.

STUDIES PLANNED AND UNDERWAY: (as of 7/18/79
organizational meeting)

- ° Net Energy Balance, study to assess one, what is the appropriate measurement technique for assessing the net energy balance of fuels; and two, using that technique for obtaining net energy balances for both conventional as well as novel fuel technologies (ethanol and methanol).
- ° Food vs Fuel, a series of studies assessing the crucial relationships and dependences of alcohol fuel production and food/feed production. Studies will include current relationships as well as projected change due to crude oil price and supply changes, alternate supply feedstocks and agricultural and energy policy variables.
- ° Distribution Requirements for Alcohol Fuels, assessment of physical and institutional requirements needed and barriers to the inexpensive carriage of alcohol fuels.
- ° Underutilized Distillery Capacity, an assessment of short-term ethanol production capacity in the U.S. Includes an assessment of current idle distillery capacity as well as additional peripheral industrial buildup.
- ° Transportation End Use Study, an assessment of the current and projected technologies for use of alcohol fuels in the all important transportation sector.
- ° Methanol Supply, Demand and Usage, an assessment of the supply, demand and usage of methanol from coal and biomass.