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STATEMENT ON THE ROLE OF THE DEPARTMENT OF DEFENSE IN THE MOBIL--ETC(U)
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STATEMENT ON

THE ROLE OF THE DEPARTMENT OF DEFENSE IN THE MOBILITY FUELS IMPLEMENTATION OF THE ENERGY SECURITY ACT OF 1980

BY

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~~FOR RESEARCH AND ADVANCED TECHNOLOGY~~

BEFORE THE

SUBCOMMITTEE ON ECONOMIC STABILIZATION

OF THE

COMMITTEE ON BANKING, FINANCE, AND URBAN AFFAIRS

OF THE

HOUSE OF REPRESENTATIVES

96TH CONGRESS, SECOND SESSION

30 JULY 1980

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

It is my privilege to have the opportunity to discuss DoD's interest in synthetic fuels with you, particularly as they relate to assured supplies of defense mobility fuels. In my remarks I specifically plan to respond to your invitation to describe the Department of Defense's role in implementing the mobility fuels assignment under the Energy Security Act of 1980. I believe that considerable progress has been made in recent months in response to DoD and the Nation's needs. The Congress and you in particular, Mr. Chairman, deserve considerable credit for your foresight in bringing the Energy Security Act (ESA) into being.

I am accompanied today by George Marienthal, Deputy Assistant Secretary of Defense for Energy, Environment and Safety, and Richard Donnelly, Deputy Director for Production Resources.

The DoD policy with respect to synthetic fuels is threefold. The first is to qualify and test synthetic fuels to assure the Services that these fuels can be used in fleets of military engines. The second is to provide assistance to the DoE and other Government agencies to achieve early synfuel production capability to meet national security objectives. The third is to assure a common approach and consistency in implementing executive authority under Title I of the ESA and in bringing about a smooth transition from the interim Defense Production Act (DPA) authority to the establishment of the Synthetic Fuels Corporation.

I. ENERGY NEEDS AND CONCERNS OF THE DEPARTMENT OF DEFENSE

A. Need for Secure and Assured Supplies

Our national security objectives can be achieved only if we are thoroughly prepared to meet essential military energy requirements. The continuation of our ability to deter armed conflict, to produce modern weapon systems, to maintain the readiness of our military forces, and to support worldwide commitments on the seas, in the air, and on the ground depends on energy, particularly liquid hydrocarbon fuels.

Accordingly, guaranteed access to assured supplies of energy, particularly mobility fuels, must be considered an essential ingredient in ensuring our national defense. This is true whether we are at peace, in a time of crisis, or at war.

In 1979 approximately 87 percent of DoD's total petroleum consumption, or 405,000 barrels per day, was for mobility fuels for use in aircraft, shipboard and land-based mobile systems. Unlike the civilian sector, in which approximately 70 percent of the petroleum consumption is in gasoline and heating oil products, DoD is considerably more dependent upon the middle distillate fuels: nearly 80 percent of these middle distillate liquid petroleum supplies are consumed by aircraft and shipboard systems. While DoD's pro rata share of the Nation's total energy usage is comparatively small, the DoD is in fact the single largest energy user in the United States and accounts for 81 percent of the total energy usage by the Federal Government.

In defense terms, our ability to provide assured supplies of energy necessarily requires a supply system that is, to the maximum extent possible, invulnerable to interruption in both war and peacetime. The 1973-74 oil embargo provided the first dramatic, albeit brief, example of our vulnerability to foreign petroleum supplies. More recent events, the unstable conditions in the Middle East and particularly in Iran, should once again serve as a constant reminder of the explicit military vulnerability we face with each additional barrel of foreign oil imported to the U.S. These events provide renewed awareness of our increasing susceptibility to the potential for political, economic, or military pressure -- pressure applied by those who either have the ability to control directly or who can indirectly influence the flow of oil to the U.S. and to its Allies.

We must have energy alternatives -- alternatives that are domestically controllable, technically feasible, and economically, environmentally, and socially acceptable, -- alternatives that are insensitive to foreign supply interruptions -- alternatives that are insensitive to capricious economic and geopolitical actions.

In wartime, the essential nature of assured supplies of mobility fuels is obvious. I assume that in wartime military fuel requirements would have top priority and could be satisfied by a combination of domestic production, conservation, reallocation, and use of strategic reserves. However, there is a broad industrial base supporting the military that would also have to draw on available sources.

B. DoD Concerns About the Synthetic Fuels Industry

We believe that rapid development of an industrial base to produce synthetic fuels is essential to the national well-being. Administration and interested industry officials have spent a considerable amount of time and effort planning this development with proper regard for environmental and socioeconomic impacts. We believe that the technology is available for an immediate start-up of synthetic fuels production. This production is feasible without adverse impact or major disruption of traditional economic patterns, nationally or regionally.

We have already begun to take the necessary steps with DoE to start procurement actions necessary to provide DoD with synthetic fuels. In this regard, we have assigned to the Defense Fuel Supply Center the responsibility to purchase these synthetic fuels by type and quantity necessary to meet DoD's requirements.

Working with DoE, we hope to speed up the development of a viable synthetic fuel industry in this country. The efforts, which to date have been fragmented, will be better focused to serve specialized DoD needs as well as the more general needs of the nation.

To date, the emphasis has been on proving the technology needed to produce synthetic crude oil from various sources. We believe it is now appropriate to devote attention to proving the technology for refining the crude to desired end-use products, and to addressing the problems of synthetic fuel distribution, supply and storage. As a consumer, the DoD is particularly interested and concerned with these facets of the effort. We are ready and willing to work with DoE to resolve any technological and logistic problems that may be associated with these issues.

II. DEPARTMENT OF DEFENSE ROLE TO IMPLEMENT THE ENERGY SECURITY ACT

A. Earlier Actions

The DoE has the lead role in implementing the Energy Security Act. The Act provides an active role for DoD and contemplates that DoD will be a consumer of some of the synthetic fuels production. The DoD is prepared to work with DoE to implement the first stages of the program under the Energy Security Act. We are prepared to use synthetic fuels meeting our specifications and to be supportive of other Government agencies in carrying out their responsibilities in improving the Nation's energy picture. In particular we are working closely with DoE and will offer all available DoD resources to assist the DoE in implementing the Act.

DoD has been testing synthetic fuels since 1970 to determine where their characteristics need to be changed to take full advantage of a full slate of refined synthetic products for military use. Our R&D efforts have made notable progress in component and engine testing. Our engine test program is continuing with a view to furthering the development of multifuel engines, adjusted specifications and engine performance and wear evaluation. While the use of synthetic fuels is not considered a major technical barrier, demonstrating the suitability of synthetic fuels in various end use systems is of importance in establishing the overall economics and market potential of the synthetic fuels industry. With respect to the DoD interest, it is essential that the suitability of synthetic fuels be fully assessed before the Armed Forces acquire and use these fuels as they become available in large quantities. The authority in the legislation which provides for a fast start stimulus for national defense purposes we hope will permit us to acquire that quantity of test synthetic fuels which we need immediately for qualification testing. This will need the cooperation of the Department of Energy. In this regard it is important that our activities be carried out in such a way as to assure consistency with, and provide a smooth transition to, the SFC. It is this longer term program of the corporation which will ultimately finance most of the synthetic fuels production of this country over the next 10-15 years.

B. Current Actions

Actions now underway in support of the Energy Security Act include:

o A list of the DoD mobility test synfuel and total fuel requirements and specifications has been provided to the Secretary of Energy and the fuels industry.

o A preliminary letter has been sent to the fuels industry asking for comments on terms and conditions that should be included in synthetic fuel procurements.

o DoD has participated with the DoE in the preparation of an Executive Order which delegates Executive Authority to the DoE and DoD in implementing Title I of the ESA.

o A Management Implementation Document has been started to define responsibilities and working arrangements between the DoE and DoD to implement the Executive Order.

o DoD has committed its available assets within its Military Departments and Agencies to implement the Act.

o DoD is continuing a comprehensive validation program in cooperation with NASA to test jet engines using synfuels.

o The Defense Fuel Supply Center (DFSC) is establishing an organization that will be prepared to assist DoE in expeditiously implementing fuel contracting under the Act after signature of the Executive Order delegating the President's authority under the Act.

The Defense Fuel Supply Center (DFSC) is well qualified to support DoE. Its history began under the Department of Interior in 1942. In 1948 it was designated the Armed Services Petroleum Purchasing Agency under the Department of the Navy. In 1962 it was renamed the Defense Petroleum Supply Center and placed under the Defense Supply Agency. Now under the Defense Logistics Agency, DFSC has responsibility for procurement of energy supplies for most of the federal agencies. DFSC has developed logistic management and energy distribution networks worldwide. To perform its distribution function it uses ships, pipelines and all modes of surface transportation. The DFSC also manages a vast network of storage facilities for its distribution network. DFSC has provided direct support to the industrial base to produce high octane gasoline. Last year, DFSC managed a fuel budget of more than $6B for an average throughput of 460,000 bbl/day. There is no corresponding capability in any other Government agency.

C. Future Actions

The Energy Security Act amends the Defense Production Act of 1950. The Department of Energy will assume the lead role in supporting the development of plants and facilities necessary for the production of synthetic fuels and the DoD will provide assistance wherever possible, which as minimum would involve providing contracting support. We believe that the Defense Production Act, as amended, will provide DoD with access to new fuel supplies which could be essential to the national defense.

In 1981 we have projected requirements of more than 90,000 bbl of synthetic fuels in our test programs, and this would increase as we test more engines to slightly over 110,000 bbl in 1982. As our efforts shift from testing individual engines on test stands to a fleetwide demonstration program, our fuel requirements for testing will increase dramatically. We estimate this requirement to be 3.5M bbl in 1983 and 7M bbl in 1984, at which time we expect to complete our testing and validation program for JP-4 grade of synthetic fuels for military jet engines.

DoD operational requirements for synthetic fuels will increase gradually as we become confident that they can be used in our military engines. By 1984 we would be able to utilize 63M bbl, approximately 170,000 bbl per day, if such a rate of assimilation is in the national interest. In 1985 this could increase to a daily rate of over 220,000 bbl. By far the greatest requirement, more than 50 percent, will be for JP-4 jet engine fuel. At that time, approximately half of DoD's fuel consumption would be synthetic. The rate of growth of our synthetic fuel requirements is based primarily on our expectation of the rate of growth of the U.S. synthetic fuel production capability, and does not represent a constraint in our ability to assimilate synthetic fuel products.

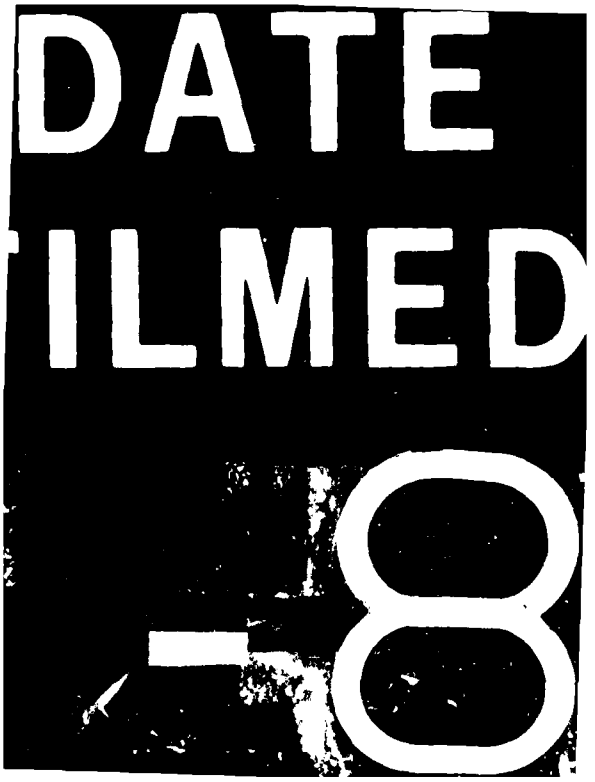
III. DEPARTMENT OF DEFENSE AND DEPARTMENT OF ENERGY INTERACTIONS

Members of the Department of Defense and the Department of Energy recognize their strong mutual interest in selected areas. This interaction has resulted in both Departments meeting objectives more rapidly to the benefit of the nation. In various areas of mutual interest approximately 50 interagency agreements have been consumated from 1975 to 1980. In the mobility fuels area, two agreements have been developed and an additional one is under discussion at the present time. On March 10-12 1980, a Joint DoD/DoE Energy Activities Workshop was held to bring together all the existing interacting activities and to examine and expand them where necessary. A result of the meeting included the establishment of policy level and working level committees which involve the managers of both departments. As a result of these activities more extensive interaction is planned for FY 1982 and beyond, and new initiatives directed at reducing the Department of Defense's dependence on foreign oil will be undertaken.

IV. CONCLUDING REMARKS

Mr. Chairman, I appreciate having the opportunity to appear before you and present the views of the Department of Defense on synthetic mobility fuels.

In summary, we believe the role of DoD as a consumer can be fully realized through the private sector properly stimulated by Government backing. The Defense Production Act amendments provide DoD with the ability to develop an access to mobility fuel supplies that could be essential to the DoD mission. Looking to the foreseeable future, we now see some relief to our dependence on foreign source of energy which, considering the reality of DoD dependence upon liquid hydrocarbon fuels, is a welcome change. Through conservation and energy management we should be able to improve further our ability to satisfy defense energy requirements in the near term with additional options available to us for developing longer-term contingency plans for energy supply.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