

not depend upon refinery capacity located, to a significant extent, on the U.S. Gulf coast.

Reserves are not increasing and drilling is off, even under price protection. We may have achieved some short run benefits. However, if our reserves cannot keep up under such protected conditions, our security in the future is indeed in question, notwithstanding other temporary benefits enjoyed.

NATIONAL SECURITY OBJECTIVES

As indicated earlier, our national security objectives should be re-examined. Several searching questions must be dealt with. Some of these questions are not ones which the National Oil Jobbers Council can definitively answer. However, we feel that even in such cases the questions may have value to the Committee in its deliberations. They are as follows:

1. *Has the time not arrived to take a Hemisphere approach in dealing with Imports of petroleum products?*

Energy studies by experts in the field indicate that the U.S.A. will use *all* of its capacity of coal, oil, gas, water power and nuclear energy by 1980. This use will be prompted by growing demand for energy due to increasing energy use per capita and increased population. It is forecast* that we will use 73 quadrillion Btu's of energy in 1980 versus 44 quadrillion Btu's used in 1960. This is an increase of 65%. Beyond 1980, it is estimated that 114 quadrillion Btu's will be needed by 2000.

Continental oil and gas reserves are limited. New fields of major significance are as scarce as hen's teeth. Water power contributes less than 4% of the total energy used and experts say that we should not count on added capacity to solve the energy gap ahead.

Recently, the adequacy of natural gas reserves has been questioned. Coal reserves are plentiful. Yet, because of degradation or waste and the difficulty of transport, coal will likely be used at mine mouth to generate electricity. But, transmission of electricity has practical limitations. (Offshore oil and shale will be dealt with separately elsewhere in this paper.) Thus, it does appear that, given some new and dramatic turn of events, we will find ourselves major importers of energy sometime within the next two decades. Some say it will be ten years, while others say it will be 30 years. Few experts feel that we can avoid this eventuality. If these experts are correct, it would appear that the U.S.A. should now consider liberalization of imports on a systematic basis from neighbors in this hemisphere.

Our war and peace security will require us to depend more and more on imports as the years progress, and sources within this hemisphere are obviously better than those across an ocean. An orderly program which slowly escalates petroleum imports as it is called for by expanding demand will strengthen neighboring countries in this hemisphere. It will keep domestic petroleum running to its capacity and will diversify our reserves in times of global conflict. Also, it will make us less vulnerable to disruption of supply by making us less dependent upon the U.S. Gulf Coast area.

2. *Should geographic dispersal of refining capacity be encouraged?*

Currently, 40-50% of refinery capacity is located in the general Oklahoma, Texas and Louisiana area (see Table #6). These states have obviously been logical locations for refining since they are close to domestic supply, close to tide water, and because, until recently, mass destruction of U.S. docks and pipe line terminus facilities was remote. Of course, there is no suggestion here that such facilities be moved, nor that growth in refining capacity should cease in these areas. Yet, it would seem wise, in the interest of national security, to encourage refining capacity to be well dispersed so that distant U.S. markets could be served. In time of attack, the Northwest and New England areas might be able to use Canadian crude oil if the Gulf were out of commission. In fact, in a pinch, they might get crude oil from a variety of sources which could enhance domestic security, and this could help fuel a globally dispersed war machine.

Advanced technology in using "all the barrel" for profitable by-products together with improving transportation facilities makes the movement of crude more feasible than in the past. Indeed, refineries in the Northwest and Northeast areas might well find it profitable to make more fuel oil, which those markets use.

*"Natural Resources for U.S. Growth," Landsburg.