3. *Should we start now to more fully encourage shale oil and offshore drilling efforts?*

Some, in government particularly, are prone to rely for expanded petroleum needs exclusively on oil shale and offshore drilling.

Oil shale is centered in the far west. Unfortunately, the material is located in an area which makes delivery of the finished products to markets most costly. Also, facilities are experimental at this writing. Government policies with respect to leasing properties is clouded.

This type of operation requires that reserves and manufacturing be contiguous (because of degredation). This is potentially dangerous to security since one bomb destroys both the reserve and the manufacturing process. Nevertheless, encouragement of the development of these facilities is wise since they tend to diversify supply sources, and therefore, might relieve those western states east of the Rockies and west of the Mississippi from almost complete reliance on distant sources. Therefore, we must conclude that limited dependence on shale oil would be useful and that Federal policies should be tailored to encourage private investments to be made in these areas. Because of the uncertain future of this new process, we should not count much on its solving problems of supply in the Eastern, Western or Central business corridors. Indeed, commercial production of shale oil, is at best, 10 years distant.

Offshore oil developments have been principally in the Gulf. Unfortunately, this does little to diversify our petroleum reserves. Other offshore areas on the Continental Shelf are being investigated. This is wise since we will need all the product available in years to come. Again, the cost is high and technology uncertain. We should encourage private enterprise to develop these resources through clear Federal and state leasing laws. But, again at this point in history, we cannot depend heavily on this source of petroleum products.

4. *Should we import finished products into the U.S.A.?*

Reliance upon foreign refineries is to be avoided, unless domestic refineries fail to produce adequate finished products to meet demand.

U.S. refineries have an obligation to produce needed products and ordinarily would do so. However, if various profit incentives are not available leading to production of one particular product, then it should be freely imported. While one can argue that the same security considerations would apply to crude imports as apply to products, there are significant differences. A U.S. refinery can accept crude from a variety of sources. Canada, Venezuela, Mexico, Central and South America, Sumatra, the Persian Gulf and Alaska are but a few sources. This crude can be made into various products as are needed at a particular time in a particular area where the need exists, i.e. fuel oil, or jet fuel, or gasolines of various grades.

If we depend to a significant degree on products manufactured in other countries, we automatically are reliant on the option of some third foreign party for a particular product at a given time which they may not wish to manufacture because of economic or other reasons. Quality may be a problem and it is far safer to transport crude, than for example, aviation gasoline. Also, the shutting down of a particular refinery could leave us without needed supply. Therefore, possessing the refinery capacity on U.S. soil allows us greater flexibility of end product supply.

Dependence upon foreign crudes from nations in this hemisphere carries some risk. Whether or not this risk is meaningful when considering Canadian, Mexican or Venezuelan reserves as compared with Gulf States reserves is debatable. Yet, the fact is that this risk is far less than it would be if we depended upon foreign crude, plus foreign crude transportation to refineries, plus foreign nationals to refine crude. The maintaining of U.S. refinery capacity cuts down overall dependance by scaling down functions performed to that of crude gathering alone.

However, if U.S. refineries *do not* produce adequate products to meet demand, the import program should be geared to import finished products to make up this deficit. Products should be brought in during these periods in a manner which will prevent wind-fall profits and/or give one set of marketers undue competitive advantage over the others. Products entering this country might come into a commodity exchange where buyers bid up to U.S. price levels, thereby ironing out price differentials. This needs study.