

oil shale are insoluble. There are none for which early answers cannot be given. Apparently all that has been lacking is sufficient impetus within the federal government to move from dead center in seeking these answers. It is only suggested now that the Congress get to the task at hand. Otherwise the twenty-first century and the discovery of new energy sources will be upon us and this vast national asset will have been left wasting in the ground where it is of benefit to no man.

[*Ed. note.* The basic research for Mr. Dominick's article was due in 1966. The author informs that since that time some significant developments have occurred with respect to a national oil shale policy. These developments are:

[1. Further increases in oil importation allowances were made by Secretary of the Interior Udall in September, 1966.

[2. Foreign governments in recent months have increased their demands upon American producing companies for higher royalty, tax and concession payments on foreign produced oil. In November, 1966, Mid-East governments threatened complete confiscation of United States oil facilities.

[3. There has been increased interest in the feasibility of in-situ retorting of shale oil by underground nuclear explosion. This interest is being carried forward by the Bureau of Mines (see *Oil and Gas Journal*, August 15, 1966, p. 44), the Division of Peaceful Nuclear Explosives of the Atomic Energy Commission and a joint venture of some fifteen private companies. In 1966, the 89th Congress appropriated about \$1.5 million for a similar AEC project in New Mexico called "Gasbuggy." There is now expectation for nuclear testing in oil shale lands in the near future.

[4. Two potentially valuable minerals were recently discovered in conjunction with oil shale deposits. Nacholite, a sodium carbonate, and Dawsonite, a potential ore of aluminum, are now being investigated for marketability by private companies. This effort has been somewhat hampered by the fact that the Department of Interior has so far refused to specify whether Dawsonite is leasable under the Mineral Leasing Act of 1920, or locatable under the Mining Act of 1872, and if locatable, whether by placer or by lode claim. Private industry awaits that determination. In the meantime, these discoveries point up the necessity for a comprehensive national oil shale policy which would put to most advantageous use all of the related minerals of the western oil shale lands.]

Senator HANSEN. If I may, Mr. Secretary, I would like to refer to testimony on page 5 of your prepared statement. You say:

Aided by these comments we have in process the further intensive study of oil shale policy which is so necessary in arriving at the decisions on a proper program. Our target date for completion of this study is mid-January 1968.

Could I ask what this study entails?

Mr. UDALL. Well, it entails really, Senator, at this point, a review of all the comments that had been received. It entails any and all second thoughts that my own people have had about what we did in May. It entails this hearing. It entails the other comments and suggestions we received.

In other words, we are going to need some time to evaluate and digest all this mass of material.

Senator HANSEN. It would be your purpose, as you proceed with this study, to firm up your feeling on regulations and perhaps to consider their publication in the Federal Register, say, within a year or two; is that correct?

Mr. Udall. Our objective is to move as rapidly as we can, and I have indicated this January date because we have this fixed in our own mind. I want you to know that.

Senator HANSEN. Thank you.

Mr. Secretary, a number of companies have pending before you at the present time applications for sodium preference right leases. It is my understanding that these companies have made detailed technical