1. Since such a tremendous public wealth is involved, why does not the Government conduct the necessary research and development for the competitive

economic extraction of oil from the shale? 2. If private research is to develop the process, is there not enough land already in private ownership to prove the value of such an operation? Extreme care should be taken that private research and development and the subsequent patents cannot be used to limit the development and competitive use of such a vast public resource.

The proposed regulations, if leasing and land exchanges are considered to be in the public interest, do, in our opinion, contain the proper safeguards for fish, wildlife, and recreation, which will adequately protect the surface of the land

after extraction has been completed.

## PRIVATE INDIVIDUALS

I. Noel de Nevers, Associate Professor, University of Utah

The policy proposed on May 7 will satisfy neither the oil companies who are expected to take up the R&D leases nor those members of the public who fear a "giveaway," nor free-enterprise advocates who will dislike the profit-sharing aspect of the regulations. I think that all parties could be satisfied if the following policy were adopted:

A. The Secretary should announce that there will be no leasing of the Federally-

owned shale lands for some fixed time period; e.g. ten years.

B. The Secretary should ask Congress to authorize a special tax rebate to those who develop commerically successful oil-shale production plants, using privatelyowned shale-oil holdings. The applicant for this tax rebate would have to agree to license to any interested parties all his patents which bear on the operation of the plant, at some predetermined, modest royalty rate.

C. The Secretary should make some firm and binding statement that a barrel of shale oil shall be treated the same as a barrel of ordinary petroleum in calcu-

lating oil import quotas.

II. J. B. Mitchell, Mineral Leasing Consultant, Washington, D.C.

Various provisions as well as the regulations as a whole as presently written, will not promote the development of the public domain oil shale deposits by

In connection with the foregoing contention, particular attention may be diprivate enterprise. rected to those provisions that: (1) impose a limit on the number of leases that may issue under the new regulations (five or six leases if they contain the maximum acreage allowed by law); (2) fail to specify the size of leases that may issue; (3) impose a condition that obligates a lessee to relinquish an unknown amount of acreage and reserves at the end of the so-called experimental work; (4) impose a payment to the Government of a percentage of net profits; (5) tend to discriminate against lease applicants that presently own oil shale reserves (there are many such companies and a number thereof have already spent considerable money in research work); (6) provide that the Government while entrusted with supervisory responsibility and authority as to safety, pollution, conservation of the mineral and other natural resources, shall also have a monetary interest in net profits (these dual roles appear undesirable from a conservation viewpoint), and (7) impose abnormal restrictions on the patent rights that a lessee can obtain by his own research expenditures. Unless the provisions just cited are eliminated or substantially modified, it seems reasonable to conclude that the proposed regulations if adopted will discourage and delay, rather than promote development of the Government-owned oil shale reserves.

Section 3172.5.—I do not feel that it was the intent of Congress to authorize the Secretary to gamble on a net profit interest. The word "royalty" (or "royalties") when used in connection with interests created by mineral leases has a commonly accepted meaning of an interest in production or the value thereof

free and clear of the cost of operations and production.

Where exchanges are to be made as contemplated by Section 2244.1-7 of the proposed regulations for the sole purpose of improving the management and exploitation of mineral deposits, it would seem appropriate if the Secretary's statutory authority is to be free from being challenged, that more appropriate legislation should be sought.

In lieu of the action contemplated by the proposed regulations, it is recom-

mended that one of the following plans be adopted: