The following are specific recommendations regarding the various aspects of

research, disclosure, patents and technology:

1. Limit government ownership of patents to instances where direct government expenditures are involved; however aim government-sponsored research at subjects of industry-wide concern such as conservation, waste disposal, resource studies, and chemical-physical data.

2. Provide in the lease for the confidential disclosure of research results and other data needed by the Department for the wise administration of the

3. As noted previously give the lessee wide latitude in the planning and execution of research.

Royalty—The case for moderation

The royalty provision of the proposed leasing regulation is unique and discriminatory—it will discourage shale oil production from Federal lands. If a graduated net profit royalty has merit it should be applied uniformly to all minerals, especially to the fuel minerals with which shale oil must compete.

The point of these figures is this. To compete successfully for capital funds oil

shale must necessarily be as profitable as other industries.

It is their belief that minimal royalties will be required at the present time to encourage development of the Federal lands. They suggest a royalty provision comparable to that for Utah state lands of 5% of the gross value of crude shale oil at the retort, or the well head in the case of insitu retorting, for the first 5 years of production with an increase of 1% per year thereafter, up to a maximum of 121/2% at the option of the lessor. Other minerals could be treated in the same manner.

Cameron and Jones see no need to introduce such concepts as governmentcontrolled technology or profits participation to protect the public interest. Provisions to encourage competition in all phases of the endeavor-land acquisition, research and production-will best serve the industry and the public.

## V. Cities Service Oil Company—August 2, 1967

The time is propitious for stimulation of oil shale development by a public lands leasing program and concur generally with the stated objectives of the proposed amendment, the May 7 draft of regulations appears to be too restrictive to be attractive to private industry.

Cities Service Oil Company believes the proposed R&D leasing program should

be altered to

(1) develop a basis for leasing of Federal oil shale lands by competitive

bidding using a bonus system with fixed royalty;

(2) discourage lease-holding for speculative purpose by requiring annual expenditures, on a predetermined scale, for R&D purposes until the achievement of commercial production;

(3) provide specific terms for holding R&D leases with commercial term to start upon satisfactory completion of research program and to continue

as long as paying quantities of deposits are produced;

(4) require disclosure to the Government (to be held confidentially) of only such technical data as may be necessary to assure that the lessee is diligently and efficiently pursuing his research operations, and permit the leasee to hold and license patents under the same conditions as any other patents, and assignment of patents.

## VI. Continental Oil Company—June 7, 1967

Their reaction is not favorable. The Continental Oil Company considers that the rights to be granted are circumscribed with restrictions and conditions to

such an extent that sufficient economic incentives will be lacking.

Conoco believes that a competitive bidding method must be devised for making public domain shale oil lands available. Criteria should be established under which prospective bidders may qualify. Acreage limitations and all other restrictions and covenants should be liberal enough to attract capital in an innovating and highly competitive economy.

## VII. Geonuclear Corporation—August 11, 1967

CER Geonuclear Corporation is not an oil company and does not have a direct interest in oil shale leasing. Nevertheless, as a sponsor of Project Bronco, a proposed nuclear experiment in oil shale, CER does have a vital concern with the proposed rules.