The failure of the Regulations to provide that a research lessee may apply the fruits of other research to enter commercial production is similar in its effect to the absence of provision for commercial production leases without research. The risks of undertaking research are increased, since the possibility of success is confined to the researcher's own efforts and since even apparently successful efforts by him may be less successful than those of others.

The apparent requirement that a particular reearch project be carried to its own conclusion regardless of the achievements of others is, in short, a substantial disincentive to the commencement of a research program. It is a disincen-

tive which serves no public interest and will frustrate development.

4. The Absence of Procedures for Settlement of Disputes

Throughout the Proposed Regulations, there are, as there must inevitably be, many points at which differences of view could arise between the lessee and the lessor. (We shall comment specifically on some of them below.) Among them are such questions as whether research is being carried out in compliance with the original program, or whether it should be; whether the program has been successfully completed; whether the program ought to be modified; whether commercial production is "justified"; what the extent of the production lease should be; whether conservation measures proposed to be taken are adequate; and a host of others. Each such question has its own substantive difficulties. But it is possible to say of every such question that a fair procedural mechanism for the prompt adjudication of differences of view will ameliorate the substantive difficulty, even though it does not remove it.

So far as the Proposed Regulations indicate, only the federal courts would be available as an alternative to unsuccessful negotiations to resolve differences. In an on-going program of research and development, the sole alternative of

Provision must be made for procedurally prompt, definite and fair arbitration of all such differences, utilizing an arbitration system which is, in fact, independent of the Department and the lessee.

To the extent that such a procedural system is not incorporated in the Regulations, the vesting of discretion in the Department to grant or not grant production leases, and to control or prevent operations is, in our view, a substantial obstacle to research leasing.

THE REGULATIONS—PARTICULAR PROBLEMS

The following numbered sections set out our comments on some particular matters with which the Proposed Regulations deal. For purposes of organization, we have grouped our comments in the order in which the problems discussed would be likely to arise in actual leasing practice. We begin, therefore, with entitlement to a research lease and conclude with the provisions governing the payment of royalties.

We have not sought to deal with every potential problem which the structure or language of the proposal suggests. Instead, we have confined even these detailed comments to matters which we believe will have an important effect on the use-

fulness of the Regulations when they are made final.

A. Selection of Leaseholds

Sections 3170 and 3171.—It appears that the selection of public domain acreage to be included in the up to 30,000 acres which will be available for disposition under the Final Regulations is to be unilaterally made by the Secretary in the light of what the Department conceives to be potentially fruitful research and development. This method of proceeding fails to take advantage of the expertise available from industry in the variety of technological areas which

There is nothing in the mere limitation to 30,000 acres which requires that the Secretray select the acreage. Section 3171.2(10) and (12) provides that the applicant must specify its program for research and its provisional plans for commercial development. It is, therefore, more reasonable that the lands be first selected by the applicant in the light of its proposed program, rather than by the Secretary in advance of application. Means are readily available to resolve problems which could arise from conflicting selections, or from other sources. What should be paramount is to utilize the capabilities of industry in the selection

of suitable reserves for research.