

out successful research programs on privately owned reserves; (2) the absence of any provision for production leases without research; (3) the apparent requirement that only the fruits of a lessee's own research may be applied under its commercial production lease; and (4) the failure to define any procedures for adjudication under which disagreements may be promptly and fairly resolved.

1. The Absence of Provision for Production Leases

The Proposed Regulations make no provision for leases for commercial production, without a prior research lease. The absence of such provision significantly impairs the fairness and utility of the Proposed Regulations.

Among others, this Corporation has announced the availability of retorting and related processes suitable for commercial application. By requiring every federal lessee to carry out research in advance of production, the achievements of past research and development, privately financed without public assistance of any kind, are excluded from application to the public domain reserves. As a result, an incentive in the form of the promise of a federal leasehold (a promise which the Final Regulations will presumably make substantial) is created for additional technological development, without regard to the achievements of the past.

This Corporation has embarked upon an active program of licensing its technologies. It is perhaps desirable that the Proposed Regulations give recognition to the value of future research. But, it is improvident to create an incentive to research to the exclusion of the utilization of existing technology.

Moreover, in the absence of proposed terms for a commercial production lease, the implication arises that the terms would be the same as those of a lease following upon research. That implication creates a disincentive to the proposed research, because the Regulations propose that the research lessee will derive no other advantage than the ability to enter production. Since the technological fruits of the research will be made available to others without reimbursement to the researcher, research may permit the researching company to enter production; but it will also permit its competitors to do so on equally advantageous terms and without any of the risks attendant on research and development of the required magnitude. The research costs we are discussing are high. For example, this Corporation, as of this date, has expended well in excess of \$16 Million (exclusive of its investments in reserves) in pursuit of the technology which it has successfully developed, and others associated with it have expended more than \$7 Million.

2. Discrimination Against Research on Private Reserves

The Proposed Regulations apparently intend to stimulate production research by making available public domain reserves for research, and by rewarding research with some assurance of public domain reserves for commercial production. However, this Corporation and others have, without any such incentive, already expended large sums in production process development on privately owned reserves. Others will very likely do so in the future.

If public domain reserves for commercial production are to be made available to those who now carry out research on the public domain, then those who have labored on their own should have similar access to the public domain reserves for production.

Provision should be made for the granting of production leaseholds to any company which, after the Regulations become effective, submits a proposal for the construction and operation of commercial facilities, utilizing technology which it has developed.

3. Limitation of Follow-On Production Leases to the Results of the Research Program

The Proposed Regulations appear to say—though not without some ambiguity—that the research lessee will be entitled to follow-on production lease only if the results of its own research program justify commercial application. (We shall discuss below the separate question of how readiness for commercial production should be determined.) It is impossible to say what public interest justifies requiring a research lessee to continue its own research program in order to enter the commercial production phase, even though it is prepared to commence production with the fruits of research carried out by others.