

In the light of the kind of research effort needed and of the scale of commercial investment to be faced, a number of facets of the proposed regulations for leasing raise serious questions that must be answered by either less stringent written regulations or a broader scope of negotiation on a case-by-case basis. Important problems and questions that now emerge in considering the proposed regulations are:

1. Should the adequacy of research performed be a government judgment? If a given company is faced with the large investment involved in converting its operation from research to commercial production, is not the company itself in the best position to choose the step of major risk in allocating its money to commercial operation? Remembering that production research will continue with daily operations and problems to be solved, can any governmental inspectors reach a meaningful judgment of adequacy of research accomplished? Conversely, could the judgment of adequacy be held up indefinitely and thus never allow production, thereby causing waste of research investment by the company that has made this investment in good faith?
  2. If all information from research is to be made immediately available to the public, what advantage would accrue to the company investing in research? Why not sit back and let "others" (perhaps only the government would be interested) do the preliminary work? During a time of open bidding for commercial acreage, would it not be better to release this information once commercial operations had begun so the company can have some competitive advantage from its research investment?
  3. Should the disclosure of all oil reserves and the revelation of all background and new patents be as restrictive as now seem to be required? The variable definitions of "reserves" as controlled by economics of production and by the differences in large and small company definitions might make such disclosures incomparable between companies. The public availability of all background patents, even if on a reasonable license fee, may serve to deter participation because of the loss of a company's competitive economic advantage.
  4. Can a firmer commitment be made regarding the size of a parcel of land that will be made available for commercial production? At present there is a great deal that must be taken on faith: first, whether a commercial lease will be given at all; and second, the size of the plot to be made available and thus the scale the eventual operation can reach.
  5. Can the sliding royalty scale be meaningfully laid out without a history on which to base this requirement? If periodic reviews of royalty are to be conducted, would not this procedure within the guidelines of experience gained from production protect the public interest?
- In our over protectiveness, however, we may now be setting up stringent regulations that will strangle an industry before it can evolve. Once the history of an oil shale industry has developed, a better basis for pertinent regulations can emerge. Regulations once set in print and established as precedent are difficult to change. Too much regulation and too much detail might well create an unworkable monster of control that could prove outmoded in its first year of operation. Let us not forget that economic incentive is a vital part of private initiative, and this aspect, too, must be protected in the contemplated development of an oil shale industry.

There are those who believe in the simple generalization that all government action is in the public interest and that private industry serves only itself. We must not be beguiled by those who consider government infallible and that total administrative regulation of our energy resources is the best way to serve all our citizens. Let us not be charmed and overawed by those who insist that *their* economic decisions be the base for regulations that directly, or indirectly, control the operation of the market place. Let us remember that our country has grown strong under a system that encourages investment of private capital with the profit motive as the catalyst for personal endeavor.

Senator Moss. I have some statements that have been submitted. Dr. Spencer Smith, who was listed as a witness, was present and asked that his written statement be placed in the record, and that will be done at this point.

(The statement referred to follows:)