2. When a lease is granted under the regulations as presently proposed, the lessee does not know if the lease will be extended for commercial production. Furthermore, if the lease is to be subsequently extended to commercial production he does not know the extent of acreage or reserves to be covered by the extended term lease. In effect, the Department of Interior proposes to require an oil shale lessee to expend very large sums of money on research without any assurance that he will have a production lease and no knowledge of what the production lease would cover if granted. This approach is entirely without precedent and will constitute a definite deterrent to research and production. Companies will be reluctant to make sizeable investment in research without knowing in advance both

the term of the lease and the acreage covered by the lease. 3. The royalty provisions of the proposed regulations would operate to discourage investment and thereby deter competition and development. The graduated royalty schedule based on net income, in addition to income taxes, would make it most difficult, if not impossible, to compete with other sources of energy. It would be difficult to administer and it would also operate to penalize the more efficient operators. We recommend that the lease provide for a fixed royalty rate not to exceed 5% of the gross value of the

4. The proposed regulations will operate to curtail research by not allowproduct from the retort or at the in situ wellhead. ing a research lessee to retain the benefits of his research discoveries and ing a research lessee to retain the benefits of his research discoveries and thereby have an opportunity to recover his large investment. Because of this many companies or individuals may wait for someone else to do the research and use the results without cost in a commercial operation. The statement of Government Patent Policy issued by President Kennedy has no application to oil shale research on Government owned lands. The Government is not financing the research costs as contemplated by the Patent Policy, but is merely making public lands available for research for an economic method or technique of extracting oil from shale.

5. These inherent uncertainties make it impossible to do the advance planning and financial evaluation necessary for financing a research and production operation. Difficulty of obtaining conventional financing will

operate to restrict competitive research and development. These problems should be eliminated by drafting a prescribed form of lease and amending the regulations to spell out in detail the rights, duties and obligations of the lessee The lessee from the outset should know the term of the lesse and the lands covered by the lease for production purposes. The duties and obligations prescribed by the lease and regulations must be detailed and specific so that immense investments will not be subject to the continuing and unilateral diseretion of successive Secretaries of the Interior. An additional benefit of having the lease and rules spelled out with particularity is that this will eliminate the necessity of the Department of Interior having to continuously make decisions requiring factual evaluation and judgment. This will also eliminate unnecessary exposure of the Secretary and Department of Interior to criticism for having negotiated leases on terms not in the best interest of the public.

B. We respectfully submit the following specific comments concerning the

1. Section 3170.0-1 and other sections indicate an intent of the Department to favor those who have not previously obtained oil shale reserves and to unfairly penalize those having a present investment in reserves and who proposed regulations: have already spent large amounts of money in research. We believe that participation by "have not" companies can be encouraged without dis-

criminating against those who now own oil shale lands. 2. Section 3170.0-5 defines oil shale but leaves it unclear as to which conditions must prevail in order for an oil shale lease to also cover dawsonite, nahcolite, and other minerals, as they occur in the Piceance Basin. The lease and regulations should specifically provide that an oil shale lease will cover oil shale and all other minerals unless those other minerals are not intermingled with the oil shale and are capable of being separately mined or produced. In the event other minerals are capable of being separately produced, the oil shale lessee should be accorded a preferential right to a lease on such separate minerals in order to avoid problems arising from reciprocal covenants of support, maintenance, and mon-interference which might occur if such minerals were under lease to another party. It would also