

Senator ALLOTT. Would the chairman yield on that?
The CHAIRMAN. Yes.

Senator ALLOTT. I would like to agree with the chairman on this, because I think it would be dangerous, and in fact in this field I think we have some illustration of it. It would be dangerous to try to extrapolate very far from a pilot plant to a full-size commercial plant and base your decisions as to what you are going to do, how you are going to treat these people, and what leases you are going to give, on that basis. I think it would be a very dangerous thing to do. I agree completely.

The CHAIRMAN. Senator Jordan?

Senator JORDAN. Thank you, Mr. Chairman.

Mr. Fisher, I am interested in one sentence in your statement, where you are speaking of certain criteria to observe in the second phase, commercial leasing, and you say, "In particular, the conservation requirement should be made explicit as early as possible." My question to you is: Has Resources for the Future arrived at any conclusions as to what these conservation requirements might be?

Mr. FISHER. Senator, we have not conducted any research on this question in oil shale. We have, I think, a couple of studies going forward on the similar question in the coal industry. One of these is a grant from us to the University of West Virginia, and there is one other. There might be some transfer of findings, but essentially it is a problem of how to deal with the overburden that is removed and any alteration of the landscape and the different ways of doing it and different levels of treatment.

Senator JORDAN. Problems that might arise out of water pollution or air pollution.

Mr. FISHER. That is right.

Senator JORDAN. And you mention the prospect of mining and utilizing the aluminum-bearing dawsonite. You want to explore fully the possibility of recovery of other minerals in the shale in addition to the oil?

Mr. FISHER. Yes.

Senator JORDAN. This, I assume, will be one of your—

Mr. FISHER. Yes. I would think in any pattern of research and development work that might take place in the first phase over the next few years, the Government would do well to make certain that the other values, conservation values and other mineral values, also be investigated. That this be part of the full package.

Senator JORDAN. Thank you.

The CHAIRMAN. Senator Hansen?

Senator HANSEN. I appreciated your very excellent statement. I would like to ask, in connection with the question just posed by Senator Jordan, would you agree that the conservation requirements which may be indicated may have to reflect the different processes that likely could be developed in order to exploit fully these resources we find underground? If we are talking about *in situ* recovery of oil, I should suspect that we might anticipate little change in the character of the land generally. However, if we talking about, and if on the basis of pilot plant operation it appears as though the removal of the overburden will be indicated and that we will actually have to take out