

the level of 400 million barrels and 1 billion barrels per year, respectively. We believe these amounts to be very essential to our energy mix. And again I believe that technically we are almost ready to go. The big difference in my opinion between the developments at Athabasca and the developments in Craig or Rifle or in that area are clearly differences of legal complexities and mining laws. I think this will come clearly out of the studies that the Public Land Law Review Commission is making. It is my opinion that significant production capacity won't be in place until there is action taken to clear these legal questions without having to go through all the long and meticulous procedures which now prevail.

Senator HANSEN. So the problems, as I understand you, Mr. Hibbard, are legal problems, legal roadblocks rather than roadblocks insofar as the technical aspects of mining are concerned.

Dr. HIBBARD. All the technical problems are not solved, let me emphasize that. But they are in a position where we could go ahead learning as we go.

Senator HANSEN. But you can't start on that until the legal problems are resolved; is that your point?

Dr. HIBBARD. Yes.

Senator HANSEN. Thank you.

And thank you, Mr. Chairman.

Senator GRUENING. Please proceed, Mr. Hibbard.

Senator ALLOTT. So that you won't have another interruption, may I ask, the study that you are referring to here, in what form will they be published, Doctor? Or will it be published?

Dr. HIBBARD. We will leave with the committee a two-volume version of the study which, at the moment, is a sheaf of working papers 10 feet high. These volumes are the digested appraisals of each commodity. We will also leave with you a summary of the 80 commodity statements contained in a reasonable number of pages. Because we propose to continue the study we do not plan to publish these volumes. I would propose, sir, if you see fit, that the summaries be put in the record.

Senator ALLOTT. I certainly think it should, Mr. Chairman.

I know that the Bureau of Mines has put out each year a compendium of minerals resources reflecting where our minerals come from, their use, and so forth. And I was wondering if this would be published in that form. If not, we might consider having it published as a Senate document or something like that at a later time. I think it is the sort of thing the country needs.

Senator GRUENING. Could these reports be made available to the committee?

Dr. HIBBARD. Yes. We will present you with both the summaries and the commodity statements.

Senator ALLOTT. Thank you.

(The summary referred to is printed as an appendix to the hearing record.)

Dr. HIBBARD. May I continue, sir.

The other factors addressed in the outlook section of the study are "domestic supply," in which potential resources are related to price; "Time-Price Relationships," in which probable price levels are estimated through the remainder of the century; "Possible Advances in Technology," in which the possibility of significant technological ad-