

As you are probably aware, there are substantial areas of the country in which these salt beds do occur, and this is a relatively small percentage of the space that is mined out just in salt production per year, so we do not see any bottleneck in that respect.

Mr. DADDARIO. You talk about 3 acres. Even though you say you do not see any bottleneck in that regard, it may be significant to ask why you changed your figure? You and Mr. Belter wrote an article, "Waste Management and Environmental Aspects of Nuclear Power," where you say that the amount of space required would be 1.2 acres.

Your statement here at page 2 states 2.8 acres. You now speak of 3 acres.

Dr. LIEBERMAN. Yes.

Mr. DADDARIO. Even though the bottleneck may not occur at 3 acres, the figure needs explanation.

Dr. LIEBERMAN. The estimates of the volumes of waste at the time that that article was prepared did not include the introduction of the breeder reactors into the economy.

With the introduction of breeder reactors, because of the greater extent to which the fuel is utilized, what we call higher burnup of the fuel, the unit activity in the volume of waste would be higher and perhaps would have to be diluted to take care of some of the temperature problem, so the estimates of the volume of wastes have gone up because by the year 2000 we anticipate indeed there will be a significant introduction of the breeder reactors. This increase, then, is reflected in a proportionate increase in the space required to handle it.

Mr. BELTER. The time that article was written was before the revised nuclear power estimates which have just come out during the past 6 months. By the year 1980 there has been substantial, about 25 to 40 percent, increase in these power estimates.

What this means is that the rate of nuclear power growth really will be increasing that much more rapidly, so we will have on the line by the year 1980, say, approximately between two and three times as much power, nuclear power, which would be carried over to the year 2000. Because of having that much more power we will be turning out that many more megawatts and we will have that much more fuel load which has to be reprocessed.

Dr. LIEBERMAN. In essence, at the time of that paper our estimate of the growth of nuclear power was faulty.

Mr. DADDARIO. You were talking about a different set of statistics?

Dr. LIEBERMAN. That is right.

Dr. TAPE. I might point out that sometimes we are pretty brash making forecasts this far in advance. Given the nature of the problem we have to do our best job at the time, looking toward the year 1980, 1990, 2000, and so on. This is true for this aspect of the problem and true for the developmental side of the problem. Modern-day technology takes a long period for development and a long period to introduce it into the civilian economy, and so on. We have to make estimates like this and do the best job we can.

Mr. DADDARIO. No one can find fault with it. I think it is important that as we see the situation differently we ought to talk about it a little bit so people can understand why there has been an adjustment.

Dr. TAPE. We need to recognize changes when they occur and update accordingly.