

The distribution of this is of some interest. The map, which does not indicate Federal Power Commission regions, indicates that New England, the Southeastern United States, the area around the Great Lakes, and the west coast are the areas of the country in which the growth of nuclear power will be the greatest. The estimates for the years 1980, 1990, and 2000 indicate the major expansions and concentrations of nuclear power in Federal Power Commission regions, regions 1, 2, 3, and 8—1 being the New England-New York-New Jersey area; 2 being the area around the Great Lakes; 3 being the southeastern quadrant of the United States; and 8 being the west coast.

I will get, a little bit later on, into the way in which this growth of nuclear power relates to the magnitude of the nuclear waste problem.

This nuclear growth is quite remarkable when one considers that it has really been only 10 years ago that the first plant; namely, the Shippingport plant now being operated by Duquesne Light & Power in Pittsburgh, went on the line. So, there is little question that the nuclear power industry is a viable and rapidly expanding industry.

The nuclear plants have been developed to the point where they are safe and reliable. The research and development program carried out by the Atomic Energy Commission, the test program which has been associated with this, the work by the industry which is involved in producing these plants, have all provided the technology to accomplish the basis for this rapid expansion.

I might also point out that a very vital factor with respect to both safety and reliability is the essential requirement for careful, high-grade engineering and a well developed regulatory program. These are also, obviously, very major factors in assuring that these plants are operated both safely and reliably.

Economics is, obviously, a factor in the growth. I do not think the utilities would be going through the expansion they are going through now if it were not clear that these plants provided some economic incentive to them.

However, as you indicated in your remarks at the outset, Mr. Chairman, there is an increasing awareness of the cleanliness of this method of producing electric power, particularly with respect to air pollution. It has been indicated to me by utility executives in the past that this, indeed, has been a consideration in their "going nuclear."

Mr. MOSHER. Does that involve an economic consideration, too?

Dr. LIEBERMAN. Yes.

Mr. MOSHER. In other words, what they would have to do to clear up their conventional practices would be so costly that it is an incentive to go nuclear?

Dr. LIEBERMAN. Not only the cost, Mr. Congressman, but the capabilities in some cases to do this. The existing technologies for certain aspects of air pollution control, at least in these cases, led these executives to the conclusion that for a variety of reasons their decision should be to go nuclear.

Dr. TAPE. I think, Congressman Mosher, when decisions are made by utility executives, frequently two competing elements will come in and it may be a little difficult to tip the scale one way or the other. I think in many of these instances the uncertainties related to what they