Dr. MUELLER. Well, I can't answer that question. I can only offer my own opinion in this area, and that is that if we are to have a viable long-term space program, then we do need, as a nation, to continue examining alternative methods of propulsion.

One of the most—in fact, we have not really been pursuing new areas of technology in the past several years as vigorously as desirable because of the constraints of our budget. I think it is most important from our long-running posture to have more new developments, new technology under development in the years ahead and NERVA has such a long leadtime that there is always a tendency to put it off.

It has been put off for 2 successive years and one cannot put these things off indefinitely. One must proceed or else the basic technology will not be used in a timely fashion.

Mr. DADDARIO. I would agree with that and I would agree wholeheartedly with the importance of having nuclear power developments in our program and I wish we would have had it sooner than later. But the fact remains that there does come a time when you make a choice.

The choices in the Apollo Applications pained all of us in this committee because we had felt last year that there should have been greater support.

This is really an observation. I wonder if this is the same logic which has inclined you to establishing priorities in the past? It seems to me, and I may be wrong about that, that at this stage NERVA has jumped over something which a year ago you felt was more important, that is just an observation, Mr. Chairman.

Mr. FULTON. Mr. Chairman?

Mr. TEAGUE. Mr. Fulton.

Mr. FULTON. There is no doubt that maneuverability in space is dependent upon the ability to have space fuels which are first easily boosted, secondly, are space storable, and thirdly, available for extended times in space.

If there is anything in space that requires defense, then of course a high-energy fuel, either chemical, liquid, or a nuclear fuel, is vital to any operations, so if we are talking security, there is just as much security for a high-energy fuel as an element as there is for a space station and to me it means more.

In conclusion, unless we are going to go into a series of programs that are expensive, bulky, and have minimum payloads because of the necessity of putting second and third stages of liquid fuel into orbit, we are going to have to advance on a long leadtime to first reduce expense, and secondly, to increase geometrically the payload because of the less weight and the probable less cubic content for the nuclear fuels.

Likewise, when we move into the nuclear fuels, we get away from the tremendous amount of insulation load that we have between hydrogen and oxygen combinations.

For example, hydrogen boils at 123° below zero and the same temperature in space is going to run 200° to 220° below zero, so we have to have the insulation there anyhow and we couldn't afford to hang a coffeepot on the safety valve in space if the hydrogen is boiling.