to be supported at any one time and in any one field; relation of basic research budget to product and developmental research expenses; similar or overlapping efforts elsewhere; and last but certainly not least the need actual or potential of the anticipated output of its research activities after the forecast costs have been incurred, and after market trends now readily discernible have evolved into significant new requirements for drugs from both the therapeutic and economic standpoint.

In other words, I am saying let us look where you are going be-

fore you get there.

It will be said by every pharmaceutical manager and research director that they do all these things; that they could not do their job if they did not; and that this is simply a restatement of what is done every time a research dollar is budgeted or a project entered into. However true this claim may be in theory, it leaves much to desire in practice. From the standpoint of cost, the research operations of the industry are not yet properly integrated into the whole pharmaceutical operation, and their relationship with other parts—particularly sales, are not clearly worked out for many reasons, most of them internal and peculiar to each individual company. Before accepting the idea that all is well in this particular segment of his responsibility because merely to do research is in itself a creditable and self-rewarding effort, a pharmaceutical manager should take a hard look at his research expenditures in relation to his project accumulative, new product forecasts, his competitive position, and the state of his own pocket book and arrive at a private conclusion that he apply the same principles of cost control to his R. & D. programs as he does to manufacturing and sales.

Research expenses can and should be closely reexamined by the pharmaceutical industry, and the resulting adjustments need to be explained to, and understood by, the scientific community generally. Objectives, and general routes toward these objectives, should be discussed openly so that better information is available to shape all concurrent research programs to make certain of better utilization of the total research dollar. It is not enough for the industry to point with pride at the size of its research budgets, or even to their past research achievements. It is now essential that they explain their research programs in terms of their place in the overall scheme of medical progress, their purposes in terms of public need, and their costs in terms of efficient procedures with a minimum of duplication and waste.

Such are some of the things that the industry can do to answer the critics now pressing for reform enforced by legislation and bureaucratic control. There is really no choice as things stand today so far down the road have matters gone. These things must be done by the industry or they will be done for it by others.

Senator Nelson. Everybody, of course, favors research and development of drugs and other commodities, and research-oriented companies have made great contributions to the drug industry and to the health of the Nation, as have other such companies. With the great continuous emphasis placed upon research in the drug industry as a justification for high prices, interestingly enough a substantial portion of the medical profession is convinced that this factor is very significant. In