

ones; business location; and effect on competition; and (d) *Effects on the stability, level, volume or other aspects of employment, wages, costs, sales, prices, or other phases of economic activity.*—As described in the earlier reference “Education and the Atom,” the genesis of the atomic energy program stemmed from the academic world. The early history of the atomic energy program describes the impact of institutions such as Columbia University, the University of Chicago, Iowa State University, the University of California and many others in the research and production efforts that led to the first atomic bomb. Ever since, educational institutions have carried a leading role in the total research and development efforts for military and peaceful uses of atomic energy. The present state of development of the atomic energy industry is in no small part due to this research activity and the parallel manpower productivity of the Nation’s colleges and universities. The nuclear education and training program of the AEC has significantly contributed to the rapid growth of college and university nuclear education capability.

Due to the complete interrelationship between research and education and training we find it difficult to separate out in a meaningful way the specific contribution of the DNET activity to economic development as requested in your questions. We believe your basic purpose is well served by the following material on “Relationship to Employment,” reproduced from “Statement of the USAEC on the Impact on Scientific and Technical Manpower of Federal Research and Development Policies.”

(d) *Relationship to employment.*—

(i) *Direct and secondary impact.*—With the exception of straight employment statistics, * * * we have no quantitative data to describe the impact of our research and development dollars upon a region. We suspect, however, that professional salaries, family housing needs, and localized laboratory procurements are the main instruments through which the sponsored research and development directly affects the nearby community. Considered solely on the basis of dollar flow into a region, we have no evidence which would lead us to believe that this one phase of governmental spending is in any way a unique or more effective mechanism for stimulating local economies than the many others now in being.

There are usually some new small businesses which develop close to our installations and which owe their genesis to the AEC activity. For example, a number of activities have located at Oak Ridge and Albuquerque to take advantage of the nearby technology, people and related sources, or markets. One such firm at Oak Ridge sells science kits, taking advantage not only of proximity to the source of much of the technology but also of the technical information resources at hand. As another case in point, the far-ranging research and development activities of the Los Alamos Scientific Laboratory and the Sandia Corp. have spawned some expansion in Albuquerque of the electronic-support function.

At Hanford (Richland, Wash.), where we are attempting to foster and encourage diversification activities, several of the new contractors who are to operate Government-owned facilities have plans to establish private plants or laboratories in the area. Such new private facilities will not necessarily be related to the AEC-supported work there, but the presence of key management personnel, technical