

## CHARTER

### Title

Nuclear Reactor Program

### Authority

On October 29, 1950, the Atomic Energy Commission approved a proposal by the Consolidated University of North Carolina for the world's first educational nuclear reactor to be located on the campus of the North Carolina State College to be designed, built, and operated by the School of Engineering. The Atomic Energy Commission also entered into a contract to provide technical assistance and \$100,000 of nuclear fuel. Funding for construction was provided by the Burlington Mills Foundation in the Amount of \$200,000. Operational and maintenance support for the Nuclear Reactor Project in the amount of \$58,000 per year was appropriated by the General Assembly in 1957. The Program for a new reactor was contained under Legislative Code No. 66578, Item 2, North Carolina State Project No. NCS 65-4.

### Mission

The mission of the Program is to apply the reactor and nuclear techniques to:

1. Supporting the educational and research needs of the Nuclear Engineering Department.
2. Supporting the research needs of other departments and schools of the University of North Carolina and other higher educational institutions.
3. Supporting the research needs of the industrial and governmental community.

### Administrative Placement

The Nuclear Reactor Program is operated by the Head of the Department of Nuclear Engineering through a Nuclear Operations Administrator and a Head, Nuclear Technical Services Group. The Nuclear Engineering Department is operated through the Office of the Dean, School of Engineering.

SUPPLEMENTARY DATA

Administrative Officer

Dr. Thomas S. Elleman, Head, Department of Nuclear Engineering

Staff and Budget Data

Engineers	3
Health Physicist	1
Reactor Supervisor	1
Chief Reactor Operator	1
Chief Reactor Maintenance	1
Secretary	1
Instrument Maker	1
Survey Technician	1

Budget 1977-1979

Personnel	\$175,236
Operation and Maintenance	33,691

Statement of Plans

The immediate plans for the Nuclear Reactor Program are those of developing new areas of nuclear capability, such as neutron radiography, activation analysis, isotope generation and analytical techniques. The long range plans are for the development of programs related to the Department of Energy.

- . Cosponsored annual Statewide conferences on productivity, 1975-78 (with the U.S. Department of Commerce and local chapter of American Institute of Industrial Engineers.
- . Directing a demonstration project on human resource development in a textile firm (with RTI)
- . Participated in a study of interjurisdictional comparisons of productivity among small local governments (with RTI)
- . Developing an Association for Improvement of Business and Industry in North Carolina to enhance coordination and communication among private and public sources of technical assistance
- . Initiating studies of computer-based system and material flow support in the aircraft industry (consortium of Southeast universities and industries with RTI)
- . Proposed a cooperative effort for local government productivity improvement demonstration and training (with North Carolina Government Productivity Commission, Department of Natural Resource and Community Development; North Carolina State University Department of Industrial Engineering, Political Science, Center for Urban Affairs)
- . Conducting projects to improve performance in small business and industry, utilizing three faculty and about twenty five undergraduate or graduate students of the Industrial Engineering Department each semester.

#### Future Plans

- . Strengthen and formalize PREP to enhance potential for encouraging high technology industry in North Carolina through
  - Technical services - Multidisciplinary engineering and scientific services; including research and development of products and processes, technology transfer, energy management, methods improvement, product liability assessment, and organization effectiveness.
  - Communications - Information clearinghouse services; including directories of services, technical information references, industry trade association contacts, statistical analyses, productivity indices, public awareness publications.
- . Cooperation with related programs emerging in neighboring states
- . Develop a Production Management Institute for advanced study by executives from industries manufacturing discrete parts.
- . Examine feasibility of a multidisciplinary study group on productivity, inflation, balance of trade, and employment issues with foundation support at the Triangle University Center for Advanced Studies.