

Leading in Advanced Nuclear Reactors: An Opportunity for Training, Education, Research and Workforce Development

ABOUT THE FUNDING

The 2022 CHIPS and Science Act authorized \$390 million to fund up to 4 U.S. universities to build advanced research reactors on their campuses. These reactors will serve as demonstration units to support the national mission of implementing nuclear power as a clean, climate-friendly electricity source. Universities likely to compete include University of Illinois, Abilene Christian University (in partnership with University of Texas and Texas A&M) and University of Missouri.

FEASIBILITY STUDY

With support from the state of North Carolina, NC State is conducting a feasibility study to **assess the technical, financial and operational aspects of establishing and operating an advanced research reactor.**

Federal funding through the CHIPS and Science Act to build modern clean energy training facilities on campus would support NC State's mission and fuel North Carolina's workforce development.

WHY NC STATE

#3 *Nuclear Engineering Graduate Program, according to US News and World Report*

NC State has the largest standalone nuclear engineering department with an on-site reactor in the country. Our graduates join the workforce in North Carolina and beyond equipped with practical skills and hands-on experiences. Expanding nuclear research and training facilities would support NC State's broad mission of education and discovery in science and engineering.

AN ADVANCED RESEARCH REACTOR WOULD

- Strengthen the clean energy workforce pipeline for North Carolina and the Southeast U.S.
- Support science and engineering research in the state and nation
- **Support NC State's mission of training, teaching and research with a new state-of-the-art technology facility**
- Bolster NC State's engagement with public and private partners
- Lead the growth of smaller, cheaper and safer nuclear power reactors in North Carolina that would generate \$1-2 billion in annual revenue for the state

- CLEAN ENERGY
- EDUCATION AND TRAINING
- PARTNERSHIPS
- RESEARCH
- WORKFORCE DEVELOPMENT
- TECHNOLOGY MATURATION

70 YEARS OF NUCLEAR RESEARCH

NC State has safely operated a light-water-based nuclear research reactor program on campus since 1952.

nrp.ne.ncsu.edu

