

IMPACTS OF FY11 HOUSE-PROPOSED REDUCTIONS ON THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY (JEFFERSON LAB)

The House-proposed reduction of \$893M for the DOE's Office of Science (compared with FY10 enacted) will have devastating and long-lasting effects on Jefferson Lab's mission and future as a world leading nuclear physics research facility, as one of Virginia's major economic and innovation engines, and as a training ground for scientists in a key field necessary to address our nation's energy independence and security. DOE's requested full-year FY11 budget for the Lab is \$93M for its base program, \$36M for the 12 GeV Upgrade Project (a \$310M construction project), and \$20M for the Technology Engineering and Development Facility (TEDF, a \$72M construction project).

Economic Impact/Loss of Jobs

- The House-proposed cut of 18% compounds to a 36% effect with only 6 months remaining in the fiscal year and will result in significant reductions in Laboratory staff, contract workforce and reduce research opportunities for students, professors and scientists from universities in the Commonwealth of Virginia, the nation, and the world at a time when our nation needs to be developing its best and brightest minds.
- Based on current labor rates and severance pay-related costs, H.R.1 could force the eventual reduction of 150 employees out of JLab's staff of 800, taking it back to employment levels not seen in two decades. In the interim, to deal with FY11 cuts at H.R.1 levels, the Lab will be forced to cut the pay of all 800 staff by 20-25% for the remainder of the fiscal year through a series of furloughs, causing serious negative impacts on the local and regional economy and jeopardizing the fragile economic recovery in the Commonwealth.
 - Current major construction projects; the \$310M 12 GeV Upgrade Project and the \$72M Technology Engineering and Development Facility (TEDF), both nearing 50% completion, would be forced to curtail or severely limit construction and procurement activities resulting in the loss of an additional ~160 jobs, primarily at firms in the Hampton Roads region. Impacts will ripple throughout the regional, state and national economy.
 - According to a recent economic impact study, Jefferson Lab generates more than \$271 million in economic output and 2,200 jobs in the Commonwealth of Virginia.
 - Nationwide, Jefferson Lab generates \$680 million in economic output and 4,422 jobs. Proportional losses of gross output and employment can be expected if H.R.1 budget levels are enacted.

Impacts on Science and Technology

- Assuming favorable budgets were to be adopted in the future, it would take the lab at least two years to recover from the reductions in staff. The long-term effects would include:
 - Loss of science results from cancelled high-profile experiments that have been planned for many years. The long-awaited 12 GeV Upgrade project will be significantly impacted, delaying its scientific program and jeopardizing U.S. world leadership in the field.
 - Severe delays result in increased costs to complete the 12 GeV and TEDF projects, further reducing the funds available for scientific research.
 - Local and U.S. universities would be adversely impacted – research at Jefferson Lab is responsible for about one-third of all Ph.D. degrees in nuclear physics awarded nationally.
 - U.S. world leadership in accelerator research and development, and future benefits to energy, medical, and national security programs will be compromised.
 - Spin-offs such as medical imaging that provide enhanced detection and treatment of disease will be curtailed.
 - Emerging technologies such as accelerator-driven energy sources, high brightness x-ray lasers, and boron-nitride nanotubes cannot be developed.

ABOUT JEFFERSON LAB

Jefferson Lab, in Newport News, VA, is a facility unique in the world for nuclear physics research serving an international user community of nearly 1300 scientists from 36 states and 40 countries. In addition, the lab provides world leadership in superconducting technology and in free electron lasers for defense, science and industrial applications.

Jefferson Lab's primary electron accelerator acts as a probe, allowing scientists to "see" inside matter in order to understand how ordinary matter is put together.

New Experimental Hall D awaiting equipment installation



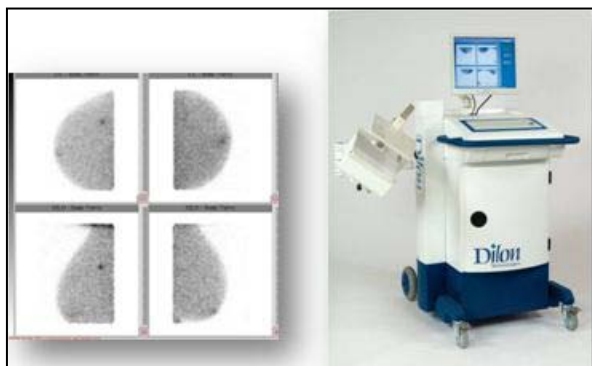
Aerial View of Jefferson Lab Site

Jefferson Lab outcomes include:

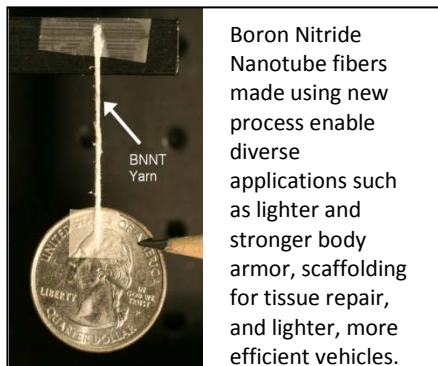
- New insight into matter at the most fundamental level
- A dynamic future at the forefront of science and technology
 - Technologies that are being applied for national defense, medical imaging, and environmental research
- Contributions to the education of the next generation through enhanced science awareness, K-12 programs that reach 12,000 students and 1,000 teachers per year, and undergraduate and graduate studies
- Excellent corporate citizenship and partnership with the local community



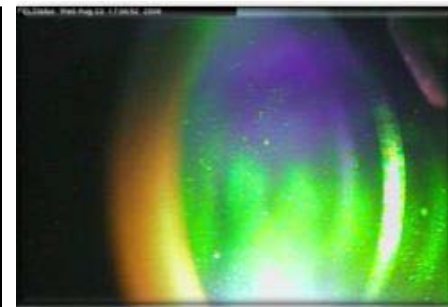
Superconducting cavities for 12 GeV Upgrade



Breast Specific Gamma Imaging based on JLab detector technology



Boron Nitride Nanotube fibers made using new process enable diverse applications such as lighter and stronger body armor, scaffolding for tissue repair, and lighter, more efficient vehicles.



JLab's record-breaking Free Electron Laser lasing at 3rd and 4th harmonics.