

[Print Page](#)

## U.S. orders shutdown of fusion energy project at Forrestal

By Greg Forester, Staff Writer

**Posted:** Tuesday, June 3, 2008 7:23 AM EDT

PLAINSBORO — A Princeton University plasma experiment related to the search for fusion energy, which has encountered budget and schedule overruns has been ordered to be shut down by the U.S. Department of Energy.

The National Compact Stellarator Experiment was an attempt to develop ways to hold hot plasma, necessary for a controlled fusion reaction, through the use of powerful magnetic fields. It is one of the more noteworthy experiments at the Princeton Plasma Physics Lab in Plainsboro.

Department of Energy officials said the cost of the project nearly doubled from its original estimate of around \$100 million, to \$170 million, and the completion date had jumped from July of this year to August 2013, over four years away.

Those jumps in time and money necessitated the shutdown of the project, according to Department of Energy officials.

"The Office of Science always weighs the scientific benefits to be obtained from facilities against the cost to the taxpayer — in this case the escalated costs and remaining uncertainties make continuation of the construction project untenable," said Raymond L. Orbach, under secretary at the department, in a statement.

The nearly 40 employees currently working on the stellarator will now be instructed to continue work on portions of the experiment, and document their work for possible future uses, according to Princeton University spokeswoman Cass Cliatt.

They will then begin assisting other personnel on the National Spherical Torus Experiment, which is known as the plasma physics lab's "flagship" project, according to university officials, who said the Department of Energy had essentially chosen between two experiments.

"What will happen now, is that the lab will focus on the exciting NSTX, which has provided a wealth of knowledge on fusion physics," Ms. Cliatt said.

U.S. Rep. Rush Holt (D-12), at one time served as assistant director of the Princeton Plasma Physics Laboratory, before leaving the position after being elected to office.

He said the cutting of funding for the stellarator experiment was a mistake.

"As the world is becoming more acutely aware of the need to explore every attractive alternate source of energy, this is no time for the U.S. to cut back on research in fusion energy," said Mr. Holt, in a statement. "The compact stellarator at Princeton is a challenging experiment, well worth the cost and effort. To put the experiment in mothballs would be a big mistake."

Ms. Cliatt said the hope of the university is that the project could be continued in the future, with a renewed source of funding.

The stellarator is related to the search for a practical way to contain a fusion reaction, which results in temperatures of millions of degrees. That heat would burn through containment materials, and the stellarator is part of the search to development methods of using strong magnetic fields to hold a fusion reaction's materials.

Princeton University has what's known as a management and operations contract with Department of Energy, which funds work performed at the Princeton Plasma Physics Lab.

[Close Window](#)