

U.S. FUSION RESEARCH

With Domestic Program at Issue, House Votes to Hold Up Funding for ITER

The Department of Energy (DOE) has jostled with Congress for years over how to fund the U.S. share of the International Thermonuclear Experimental Reactor (ITER). Now some key members of Congress want to take the project hostage until the White House lays out a funding plan that covers both ITER and domestic fusion research.

Although the 2006 budget proposed by the White House would increase fusion research spending by 17%, to \$291 million, it gouges U.S. projects while pledging \$50 million for the nascent ITER. Last week, the House of Representatives restored the domestic money as part of a \$3.7 billion budget for DOE's Office of Science.

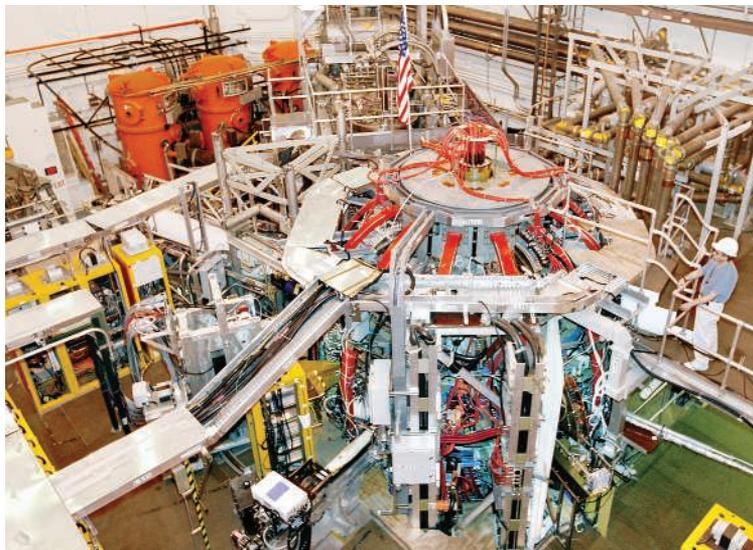
But it held up the 2006 ITER funds until March 2007, 5 months after the start of the fiscal year, and threatened to cut the funds in future spending bills. An amendment went a step further, preventing the United States from agreeing to join the \$5 billion plasma reactor effort until that date.

House Science Committee Chair Sherwood Boehlert (R-NY), who introduced the delaying amendment, said its purpose is to force DOE to reveal "how we're going to pay for ITER before we sign on the dotted line." Other lawmakers, aware that yearly U.S. commitments to ITER are due to peak at \$208 million by 2009, hope that the move pushes the White House into providing new funds for the entire field. Funding for domestic fusion research has been on the decline since 1995.

Run times at fusion facilities in Boston, San Diego, California, and Princeton, New Jersey—all of which, like ITER, use the well-developed, doughnutlike "tokamak" shape to hold plasma—would be cut by two-thirds under the president's budget. The cuts would also starve research into promising but less developed plasma-containment methods, say legislators.

DOE officials declined comment on the congressional move, although in March, Ray Orbach, head of the Office of Science, testified that he's trying to "reorient the domestic program toward ITER." Boehlert, for his part, said last week that the Administration tradeoff strategy "makes sense."

Cadarache, France, appears to have won the



Defused. DOE's proposed 2006 budget for fusion contains no money to run the National Spherical Torus Experiment at Princeton.

race to host the six-partner ITER project (*Science*, 13 May, p. 934), and it seems unlikely that the latest congressional move will affect final negotiations between the European

SCIENTIFIC PUBLICATION

HHS Asks *PNAS* to Pull Bioterrorism Paper

In an unprecedented move, officials at the Department of Health and Human Services (HHS) asked the *Proceedings of the National Academy of Sciences* (*PNAS*) to pull a bioterrorism-related paper that the journal planned to publish online on 30 May. The journal took the paper off its publication schedule and was reviewing it internally when this issue of *Science* went to press.

The paper, by mathematician Lawrence Wein of Stanford University and graduate student Yifan Lu, models how bioterrorists could wreak havoc by slipping a small amount of botulinum toxin into the U.S. milk supply, and it spells out interventions that the government and the dairy industry could take to prevent this nightmare scenario.

Stewart Simonson, HHS's assistant secretary for public health emergency preparedness, acknowledges that the idea of using botulinum as a bioweapon has already been widely discussed. "It's not the concept itself; you can't control everything," says Simonson. "It is the granularity of the detail." Wein, concerned about harming the chances that *PNAS* will eventually publish his paper, declined to discuss publicly HHS's request or the journal's

interaction with him. On 30 May, however, *The New York Times* published an opinion piece by Wein—which the newspaper had accepted before *PNAS* decided to hold the report—that described the study in some detail.

PNAS highlighted the paper in its weekly tip sheet sent to journalists on 25 May and also made an embargoed draft available. Simonson—whose office had received an earlier draft from Wein months before—says the *PNAS* paper first came to his attention the following evening. The next morning, he sent a letter to Bruce Alberts, president of the National Academy of Sciences, the journal's publisher, asking *PNAS* not to publish the paper. Later that day, *PNAS* sent an e-mail to reporters that publication of the paper had been delayed, simply noting that a new publication date will be announced. "We made a request," says Simonson. "There wasn't anything coercive."

Simonson recognizes that the flap will probably draw more attention to the paper than it otherwise might have received. "We thought about that," he says, "but it's a balance, and it struck us as the right thing to do."

The debate now moves to the Senate, which last year agreed in conference to reverse proposed cuts for domestic fusion work.

—EU KINTISCH

Union and Japan over the location. Scientists at JET, the fusion reactor near Oxford, U.K., believe the U.S. dithering is "no big deal," according to a lab spokesperson, because the United States is slated to fund only 10% of the project's cost. Richard Hazeltine, chair of DOE's advisory board on fusion, says he feels Congress was justified in taking such harsh steps, although he is "uncomfortable" with the tactics.

The House action revives the possibility that the United States could repeat its 1997 decision to leave ITER, a project it helped launch 2 decades ago and then rejoined in 2003. "It will be important for us to be part of it," says Stephen Dean of Fusion Power Associates in Gaithersburg, Maryland, but not at the expense of domestic work. And will U.S. scientists utilize ITER if their government fails to help build it? "[S]omehow or another, we'll participate," Dean predicts.

The debate now moves to the Senate, which last year agreed in conference to reverse proposed cuts for domestic fusion work.

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