On May 25, the full U. S. House House of Representatives approved, by voice vote, an amendment by Science Committee Chairman Sherwood Boehlert (R-NY) to prevent the U.S. from entering into an agreement on ITER, the international fusion experiment, before March 1, 2006. Boehlert's action, taken with the endorsement of House Appropriations Committee Chair David Hobson (R-OH), reflects a growing gap between the fusion policy presented by the Department of Energy (DOE) and that advocated by the U. S. fusion community and the Congress. The latter, a hard won consensus, advocates a policy in which ITER is funded by funds over and above the existing core domestic fusion budget, while the DOE seems determined to fund much of the ITER costs by cutting the domestic fusion effort.

The problem began two years ago when the U. S. decided to rejoin the international ITER effort in a flat FY 2004 budget request. This prompted the DOE's Fusion Energy Sciences Advisory Committee (FESAC), in a March 5, 2003 letter, to tell DOE Office of Science Director Ray Orbach regarding the FY 2004 budget request, "Both its total amount and its devastating cuts in certain program elements are alarming. This note expresses our most serious concerns." (FPN03-17) Although Congress subsequently added over $10 million to the fusion request, it did so with the admonition that funds for fusion technology (which were targeted for most of the cuts) be restored and that "if the Department intends to recommend ITER participation in the Fiscal Year 2005 budget request, the Committee expects the Department will do so without harm to domestic fusion research or to other programs in the DOE Science budget." (FPN03-40)

When submitting the FY 2005 request, however, the DOE ignored this advice. Once again the DOE submitted a flat budget request but indicated its intent to terminate all long-range fusion technology work and to redirect much of the remaining research effort to support for ITER. Research on inertial fusion energy (IFE) was especially targeted by DOE in this request, prompting the FESAC to urge DOE to carry out "a coordinated (IFE) program with some level of research on all the key components (targets, drivers and chambers) always keeping the end product in mind." (FPN04-21) Once more the Congress added over $10 million to the request, indicating that the planned reductions in the domestic program should not be implemented (FPN04-41). When submitting the FY 2006 budget request, it became clear that DOE had no intention of following Congressional guidance on not cutting the domestic fusion budget to fund ITER. In that request, DOE indicated its plan to continue termination of fusion technology and cuts to IFE and also to cut domestic magnetic fusion research to fund ITER (FPN05-12). In acting on the FY 2006, the House of Representatives has threatened to not fund ITER at all if this practice continues (FPN05-43).
Boehlert made the following statement on the floor to explain his amendment:

"Mr. Chairman,

"Let me start by thanking Chairman Hobson for working with us on this entire bill and on our amendment. I understand that the amendment will be accepted, and I appreciate that.

"But I do want to explain this amendment because its purpose is to bring to a head an important issue that might otherwise be overlooked.

"The Department of Energy is moving ahead with negotiating U.S. participation in ITER, the international fusion energy project, which is all to the good. I support U.S. participation in ITER, a critical experiment that will help determine, finally, if fusion is a realistic option for energy production. If it is, fusion might go a long way toward solving our looming energy supply shortfall.

"But ITER is expensive. The U.S. contribution is expected to exceed $1 billion. And I want to make sure that before we commit a dime to ITER that we have a consensus on how we will find that money.

"I am very, very tired of the U.S. signing on to international science agreements that we later come to regret. We're then left with the Hobson's choice - the Chairman will excuse the expression - the Hobson's choice of either reneging on our international agreement or funneling money into a project we don't actually need.

"So this time we have a chance to avoid that uncomfortable choice. We have time to ensure that the Administration and the Congress and the fusion science community agree on how we're going to pay for ITER before we sign on the dotted line. And that's exactly what this amendment is designed to guarantee.

"The amendment says, in effect, that we can't finalize an agreement on ITER before March 1 of next year. By then we will have in hand both the proposed ITER agreement and the President's fiscal 2007 budget request. With that information, we should be able to determine if there is a consensus on moving forward.

"I don't think there is a consensus now. The Department of Energy says that
ITER is its top science facility priority, and that other programs, including other fusion programs may have to be cut to fund it. In any event, the domestic fusion program will have to change for ITER to move forward. That makes sense to me.

"But the fusion community and apparently the appropriators seem to be saying that the domestic fusion program has to be held harmless for ITER to move forward. That's simply not realistic, and we cannot move forward with ITER with that presumption. So we need to decide before we commit to ITER whether we're willing to make the necessary sacrifices to pay for it.

"Again, my amendment will give us time to do that, and I look forward to working with everyone concerned to try to reach a consensus. But the U.S. must not finalize an agreement on ITER until we have consensus on how to pay for it - not just an Administration plan - a consensus.

"In the meantime, the site selection and planning process and negotiations on ITER can and should continue. But I will do all I can to prevent the U.S. from entering into an agreement if no one is willing to make the sacrifices necessary to pay for it.

"Moving ahead without consensus will mean either reneging on our agreement or killing other worthy programs within the Office of Science to pay the disproportionate costs of the fusion program. Let's avoid that.

"Again, I look forward to working with Chairman Hobson and everyone concerned with this issue to build a strong and balanced fusion program."

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