The Fight Over U.S. Fusion Programs Picks Up Steam

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The outrageous year-long drive by the Obama Administration to cripple the American magnetic fusion energy research program, and now also to slow down the laser fusion program, has raised some hackles on Capitol Hill.

On May 3, the chairman and ranking member of the Senate Energy and Natural Resources Committee, Senators Lisa Murkowsi (R-Alaska) and Ron Wyden (D-OR), were joined by the bipartisan leadership of the Appropriations Subcommittee on Energy and Water—Senators Dianne Feinstein (D-CA) and Lamar Alexander (R-TN)—in sending a letter to the General Accountability Office (GAO) requesting an investigation into the fusion program. The Senators note that while funding for the domestic fusion energy programs and facilities have been cut, the funding for the international ITER fusion tokamak experiment has been doubled from last year's request. They express their concern about the health and future of U.S. fusion research.

At the same time that magnetic fusion experiments are under attack, the Obama White House has proposed a cut to Lawrence Livermore's National Ignition Facility (NIF) laser fusion program, from \$409 million to \$329 million. This, as punishment for Livermore scientists' failure to reach ignition of the fusion fuel, which they had promised to accomplish within the Fiscal Year 2012.

Two months ago, the National Academy of Sciences released a report done by its National Research Council which concluded that "the potential benefits of successful development of an inertial confinement fusion-based energy technology justify investment in fusion energy research and development." It continues: "Although ignition of the fusion fuel has not yet been achieved, scientific and technological progress in inertial confinement fusion over the past decade has been substantial." The report recommends continued funding, and the pursuit of a wider range of potential techniques for achieving fusion.

Although the action by the Senate leaders brings attention to the plight of fusion research, their approach is to try to find ways of cutting the cost of the U.S. contributions to ITER, in order to save the domestic programs. Their instructions to the GAO for the review consist of trying to find ways the U.S. could delay, trim, or "adjust" the hardware it has committed to contribute to ITER. The solution to the problem is obvious, since there is clearly no way to rejigger a shrinking fusion budget.