## House Energy and Water Appropriations Subcommittee Report on FY 2013 Budget April 25, 2012

## FUSION ENERGY SCIENCES

The Fusion Energy Sciences program supports basic research and experimentation aiming to harness nuclear fusion for energy production. The Committee recommends \$474,617,000 for fusion energy sciences, \$72,440,000 above fiscal year 2012 and \$76,293,000 above the request.

The domestic fusion program is a critical component of United States science leadership and a necessary building block of any successful fusion projects, including ITER. The recommendation includes \$296,617,000 for the domestic fusion program, \$560,000 below fiscal year 2012 and \$48,293,000 above the request. The request proposes to shut down the Alcator C-Mod facility and provides only enough funding for decommissioning and existing graduate students. The Department is instead directed to continue operations at the Alcator C-Mod facility and to fund continued research, operations, and upgrades across the Office of Science's domestic fusion enterprise.

The recommendation includes \$178,000,000 for the United States contribution to ITER, the international collaboration to construct the world's first self-sustaining experimental fusion reactor, \$73,000,000 above fiscal year 2012 and \$28,000,000 above the request. ITER is an important international collaboration that represents a major step forward in fusion energy science, but its funding requirements will create substantial budgetary challenges throughout the decade. The Committee appreciates that the Office of Science is grappling with these challenges but notes that the budget request does not propose a viable or well-planned solution. The Committee recommendation includes funding to continue the domestic fusion program at approximately the fiscal year 2012 level, and to increase ITER towards its planned funding level for fiscal year 2013. Looking forward, however, the increasing requirements for ITER will continue to pose challenges, and the Committee believes that long-term policy decisions for the Fusion Energy Sciences should be guided by impartial analysis of scientific needs and opportunities, and with an eye on American competitiveness and leadership. The Committee therefore reiterates the importance of the ten-year plan for Fusion Energy Sciences directed in the fiscal year 2012 appropriations conference report, of that plan's timely delivery, and of the inclusion of priorities across domestic and international fusion facilities, projects, and programs.