

House FY-2014 Omnibus Appropriations Bill Language
for DOE Office of Science

SCIENCE

The agreement provides \$5,071,000,000 for the Office of Science. The Act includes a provision regarding United States cash contributions to the International Thermonuclear Experimental Reactor (ITER) Organization. The agreement does not include the use of prior-year balances. The Secretary of Energy is directed to provide to the Committees on Appropriations of the House of Representatives and the Senate, not later than 120 days after enactment of this Act, a detailed plan on recruitment and retention of diverse talent that includes outreach and recruitment programs at Historically Black Colleges and Universities and other Minority Serving Institutions.

Advanced Scientific Computing Research.-Within available funds, the agreement provides \$93,000,000 for the Oak Ridge Leadership Computing Facility, \$67,000,000 for the Argonne Leadership Computing Facility, \$65,605,000 for the National Energy Research Scientific Computing Center at Lawrence Berkeley National Laboratory, \$32,608,000 for the Energy Sciences Network, and not less than \$76,000,000 for the exascale initiative. The agreement addresses the Computational Sciences Graduate Fellowship Program under the Workforce Development for Teachers and Scientists heading.

Basic Energy Science.-Within available funds, the agreement includes \$24,237,000 for the fifth year of the Fuels from Sunlight Innovation Hub, \$24,237,000 for the second year of the Batteries and Energy Storage Innovation Hub, \$10,000,000 for the Experimental Program to Stimulate Competitive Research, and up to \$100,000,000 for Energy Frontier Research Centers.

For scientific user facilities, the agreement provides \$45,000,000 for major items of equipment, to include \$20,000,000 for the Advanced Photon Source Upgrade and \$25,000,000 for National Synchrotron Light Source II (NSLS-II) Experimental Tools. For facilities operations, the agreement provides \$778,785,000 for Synchrotron Radiation Light Sources, High-Flux Neutron Sources, and Nanoscale Science Research Centers, to include \$56,000,000 for early operations of NSLS-II at Brookhaven National Laboratory. The agreement also includes \$37,400,000 for Other Project Costs, including \$10,000,000 for the LINAC Coherent Light Source II (LCLS-II).

For construction, the agreement provides \$75,700,000 for LCLS-II at SLAC National Accelerator Laboratory to account for the project's revised baseline cost, schedule, and scope. The agreement includes no direction regarding a novel free-electron laser array light source.

Biological and Environmental Research.-Within available funds, the agreement provides \$75,000,000 for the second year of the second five-year term of the three BioEnergy Research Centers, \$5,000,000 to continue nuclear medicine research with human applications, and \$500,000 for the Department to engage universities more directly in climate analysis.

Fusion Energy Sciences.-The agreement includes \$305,677,000 for the domestic fusion program. Within available funds, the agreement provides \$62,550,000 for the National Spherical Torus Experiment, of which \$22,250,000 is for research, \$16,600,000 is for operations, and \$23,700,000

is for major items of equipment; \$75,160,000 for DIII-D, of which \$31,200,000 is for research and \$43,960,000 is for operations; and \$22,260,000 for operations and research at Alcator C-Mod.

Furthermore, above the budget request, the agreement provides an additional \$1,700,000 for International Research, \$8,500,000 for High Energy Density Laboratory Physics, \$3,500,000 for Theory, \$2,500,000 for Science Discovery through Advanced Computing, \$5,000,000 for General Plant Projects, \$3,000,000 for Enabling Research and Development, \$2,500,000 for heavy ion fusion research, and \$3,000,000 to support increased computational and advanced measurement capabilities for validated fusion simulation development. Not later than 180 days after enactment of this Act, the Department shall submit to the Committees on Appropriations of the House of Representatives and the Senate a plan with research goals and resource needs to implement a Fusion Simulation program.

The agreement provides \$200,000,000 for the U.S. contribution to the ITER project and establishes a new congressional reprogramming control point

Not later than 12 months after enactment of this Act, the Department shall submit a ten-year strategic fusion plan to the Committees on Appropriations of the House of Representatives and the Senate. The ten-year plan should assume U.S. participation in ITER and assess priorities for the domestic fusion program based on three funding scenarios with the fiscal year 2014 enacted level as the funding baseline: (1) modest growth, (2) budget growth based only on a cost-of-living-adjusted fiscal year 2014 budget, and (3) flat funding. The January 2013 Nuclear Science Advisory Committee report on priorities for nuclear physics used similar funding scenarios and should serve as a model for assessing priorities for the fusion program.

High Energy Physics.-Within available funds, the agreement provides \$15,000,000 to support minimal, sustaining operations at the Homestake Mine in South Dakota, \$9,931,000 for Accelerator Stewardship, and \$26,000,000 for the Long Baseline Neutrino Experiment (LBNE), to include \$10,000,000 for research and development and \$16,000,000 for project engineering and design. The agreement includes no funds for long-lead procurements or construction activities for the LBNE project.

Nuclear Physics.-Within available funds, the agreement provides \$165,224,000 for Relativistic Heavy Ion Collider operations to support a standalone run of approximately 22 weeks. The agreement also includes \$55,000,000 for the Facility for Rare Isotope Beams (FRIB) at Michigan State University and establishes a new congressional reprogramming control point.

Workforce Development for Teachers and Scientists.-The agreement provides \$26,500,000. Within available funds, the agreement includes an additional \$10,000,000 to support Science, Technology, Engineering, and Mathematics (STEM) programs that were proposed to be terminated in association with the Administration's interagency STEM consolidation plan. Prior to execution of these additional funds, the Department shall submit a spend plan to the Committees on Appropriations of the House of Representatives and the Senate.