

sioning Fund, the same as the budget request. This amount includes \$559,368,000 for decontamination and decommissioning activities at the gaseous diffusion plants and \$20,000,000 for Title X uranium and thorium reimbursements.

SCIENCE

Appropriation, 2006	\$3,596,393,000
Budget estimate, 2007	4,101,710,000
Recommended, 2007	4,131,710,000
Comparison:	
Appropriation, 2006	+535,317,000
Budget Estimate, 2007	+30,000,000

The Science account funds the Department's work on high energy physics, nuclear physics, biological and environmental sciences, basic energy sciences, advanced scientific computing, maintenance of the laboratories physical infrastructure, fusion energy sciences, safeguards and security, workforce development for teachers and scientists, safeguards and security at Office of Science facilities, and science program direction.

The Committee is generally pleased with the Department's budget request for the Office of Science in fiscal year 2007. This request finally reverses the trend of recent years, which saw the requests for the Office of Science held essentially flat. As a consequence, funding for physical sciences research, funded at the federal level primarily by the DOE Office of Science, lagged seriously behind funding for life sciences research. Congress was forced to provide additional funding to address obvious deficiencies in the Office of Science request. Fortunately, the fiscal year 2007 request fully funds operating time at existing DOE user facilities, funds the investment in major new research facilities such as the International Thermonuclear Experimental Reactor, the International Linear Collider, and the 12 GeV upgrade to the Continuous Electron Beam Accelerator Facility, and maintains a healthy level of funding for ongoing research at the DOE laboratories and at universities.. The fiscal year 2007 budget request appears to strike the right balance between maximizing existing capabilities and investing in new capabilities for the future.

The Committee recognizes that funding a significant increase for the Office of Science required some difficult choices regarding other DOE programs. However, the Committee supports the Secretary's judgment that robust funding for the basic research mission of the Department represents the best long-term use of the Department's constrained resources, and the best long-term investment for the economic future of the country. The Office of Science took seriously the Congressional direction to prepare laboratory business plans and five-year budget plans, and these plans give added credibility and context to the fiscal year 2007 budget request.

The Committee recommendation is \$4,131,710,000, an increase of \$30,000,000 compared to the budget request and \$535,319,000 over the fiscal year 2006 enacted level. Compared to the previous fiscal year, the Committee has reduced the number and dollar value of House-directed projects in the Biological and Environmental Research subaccount to \$30,000,000, and has provided additional

funding for these projects so they do not diminish the proposed American Competitiveness Initiative.

HIGH ENERGY PHYSICS

The Committee recommends a total of \$775,099,000 for high energy physics, the same as the budget request. The Committee supports the requested increase in research and development activities, from \$30,000,000 to \$60,000,000, to prepare for the International Linear Collider (ILC), including detailed studies of possible U.S. sites for the ILC. The Committee also supports the construction funding request of \$10,300,000 for Preliminary Engineering and Design (PED) for the new Electron Neutrino Appearance detector (project 07-SC-07), which will maximize the science to be obtained from the Neutrinos at the Main Injector (NuMI) project at Fermilab.

Over the past few years, the Committee has consistently supported the DOE/NASA Joint Dark Energy Mission (JDEM), a space probe to help answer the fundamental physics question of our time what is the "dark energy" that constitutes the majority of the universe. Answering this question is among the top priorities of the physics community and of the Office of Science, and the Committee strongly believes that this initiative should move forward. DOE has done its part, developing the SuperNova Acceleration Probe (SNAP) as the DOE mission concept for JDEM. Unfortunately, NASA has failed to budget and program for launch services for JDEM. Unfortunately, in spite of best intentions, the multi-agency aspect of this initiative poses insurmountable problems that imperil its future.

Therefore, the Committee directs the Department to begin planning for a single-agency dark energy mission with a launch in fiscal year 2013. The Committee directs DOE to explore other launch options, including cooperative international approaches and the procurement of private launch services, to get the SNAP platform into space. DOE is to report back to the House and Senate Appropriations Committees, not later than March 2, 2007, on the cost and feasibility of a single-agency mission, including the use of alternative launch options. The Committee will consider providing further guidance on this issue in the fiscal year 2008 appropriations bill and report.

The control level is at the High Energy Physics level.

NUCLEAR PHYSICS

The Committee recommendation for nuclear physics is \$454,060,000, the same as the budget request. The requested funding will support increased operations of the Thomas Jefferson National Accelerator Facility and the Relativistic Heavy Ion Collider. The requested funding will also complete PED (project 06-SC-02) and initiate construction (project 07-SC-02) for the Electron Beam Ion Source at Brookhaven National Laboratory, and initiate PED for the 12 GeV upgrade to the Continuous Beam Electron Beam Accelerator Facility at the Thomas Jefferson National Accelerator Facility (project 07-SC-01).

Section 981 of the Energy Policy Act of 2005 (P.L. 109-58) directs the Secretary to construct and operate a Rare Isotope Accelerator (RIA), with construction to commence no later than September 30,

2008. Unfortunately, the Department has ignored this direction, and the fiscal year 2007 budget includes no funding for RIA. Instead, the Department proposes \$4,000,000 for “generic R&D activities aimed at development of exotic beam capabilities.” Despite the high near-term priority assigned to RIA in the “Facilities for the Future of Science: A Twenty-Year Outlook” report, prepared by the Office of Science in 2004, RIA seems to have been supplanted by a longer-term international facility for exotic beams research. The Department, in its March 20, 2006, report to the House and Senate Appropriations Committees as directed in the statement of managers accompanying the conference report for the Energy and Water Development Appropriations Act, 2006 (P.L. 109–103), argues that this shift is a sound programmatic decision and in the best interests of the nuclear physics community. The Committee directs the Department to submit a report to the House and Senate Appropriations Committees providing the Department’s plans to comply with Section 981 of the Energy Policy Act of 2005, or the legislative proposal to seek relief from the requirements of that section. In order to inform Congress prior to conference on the fiscal year 2007 bill, this report should be submitted no later than August 11, 2006.

BIOLOGICAL AND ENVIRONMENTAL RESEARCH

The Committee recommendation for biological and environmental research is \$540,263,000, an increase of \$30,000,000 over the budget request. The Committee recommendation provides an additional \$30,000,000 for House-directed university and hospital earmarks.

The Committee concurs with the proposed re-scoping of the Genomics: GTL program, from four separate facilities to two vertically-integrated sets of facilities. The Committee reiterates its previous guidance that any Genomics: GTL facilities must be fully competed. The funds appropriated in fiscal year 2005 for Preliminary Engineering and Design (PED) work for the Genomics: GTL facilities are available to fund operating expenses for the proposed new Genomics: GTL centers.

The list of House-directed projects is listed in the table below.

Congressionally Directed Office of Science Projects	Committee Recommendations
Environmental and Natural Resources Phase II Facility Univ. of Arizona (AZ)	\$700,000
Synchrotron accelerator at Loma Linda University Medical Center (CA)	1,500,000
St.Mary's Medical Center San Francisco (CA)	500,000
Gene and Protein Research Children's Hospital, LA (CA)	250,000
Regis University Science Building (CO)	250,000
Live cell molecular imaging system Univ. of Connecticut health center (CT)	250,000
Upgrade of electrical utilities at Norwalk Hospital (CT)	300,000
Research and Environmental Center at Mystic Aquarium (CT)	400,000
Minority Science Center at St.Thomas University (FL)	250,000
Digital audio technology for the Blind and Dyslexic (FL)	400,000
Pediatric Neurological Institute at Miami Children's Hospital (FL)	250,000
Science center at Eckerd College (FL)	400,000
Science Facility at Florida Memorial University (FL)	250,000
Grady Health Systems Disaster Preparedness Center project (GA)	200,000
Georgia State University Science Research Laboratory (GA)	750,000
Biomass Research at the University of Hawaii (HI)	500,000
Science facility construction at Luther College (IA)	700,000
Science Building construction at Waubensee Community College (IL)	1,000,000
Advanced Science and Technology Adjudication Resource Center (Multi State)	250,000
Children's Hospital of Illinois (IL)	400,000
Medical PACS system at Perry Memorial Hospital (IL)	200,000
Neuroscience Laboratory at Dominican University (IL)	250,000
Jackson Park Hospital (IL)	250,000
Chicago Children's Hospital (IL)	500,000
Research Facility at Chicago State University (IL)	250,000
Teaching facilities at Indiana Wesleyan University School of Nursing (IN)	200,000
Innovation Park construction at Notre Dame University (IN)	350,000
Linear Accelerator at Scheck Medical Center (IN)	200,000
Notre Dame Ecological Genomics Research Institute (IN)	1,000,000
Purdue Calumet Water Institute (IN)	500,000
Indianapolis Energy Smart Desktop Initiative (IN)	500,000
Research Lab complex at Pikeville Medical center (KY)	400,000
Nan engineering Systems at Louisiana Tech. University (LA)	400,000
Westfield State College Environmental Center (MA)	250,000
Integrative Science Building at University of Massachusetts (MA)	750,000

Pioneer Valley Life Science Initiative University of Massachusetts (MA)	500,000
Emmanuel College Center for Science Partnership (MA)	250,000
Life Science Research at Michigan Research Institute (MI)	1,000,000
Marquette General Hospital (MI)	250,000
Augsburg College (MN)	1,000,000
Duchenne Muscular Dystrophy Research at Children's National Medical Center (DC)	400,000
Pediatric Imaging Center at Carolinas Medical Center (NC)	400,000
Equipment for Biomedical Imaging University of North Carolina (NC)	900,000
Electronic patient records system at Somerset Medical Center (NJ)	700,000
Tomotherapy cancer treatment system at Valley Hospital (NJ)	200,000
Linear Accelerator at C.R. Wood Cancer Center at Glens Falls Hospital (NY)	400,000
Research at the Environmental System Center at Syracuse University (NY)	500,000
Rochester General Hospital (NY)	500,000
Fordham University Regional Science Center (NY)	500,000
Biomarker and Environmental Laboratory Core at Cincinnati Children's Hospital (OH)	400,000
Duchenne Muscular Dystrophy Research at Columbus Children's Hospital (OH)	400,000
AVETeC Network Infrastructure Improvement (OH)	1,850,000
Ohio State Univ. collaboration with Earth University (OH)	200,000
Advanced Cell Based Screening at Cleveland Clinic (OH)	400,000
Research in Electric and Aerospace Tech. at Cleveland State University (OH)	250,000
Science Building at Ohio Dominican University (OH)	200,000
Science Center at Albright College (PA)	350,000
Acute Cardiac Treatment Unit at Chester Co. Hospital (PA)	250,000
Philadelphia Educational Advancement Alliance (PA)	500,000
Advanced Building Efficiency Testbed at Carnegie Mellon University (PA)	250,000
Carolinas Neuromuscular ALS-MDA Center (SC)	250,000
Cardiac Catherization research and equipment at Metroplex Hospital (TX)	400,000
CT scan at Baptist Orange Hospital (TX)	200,000
Medical equipment for Logan's Cancer Center (UT)	200,000
Westminster College (UT)	250,000
Completion of Massey Cancer Research Center Virginia Commonwealth Univ. (VA)	400,000
Virginia Science Museum (VA)	250,000

BASIC ENERGY SCIENCES

The Committee recommendation for basic energy sciences is \$1,420,980,000, the same as the budget request and an increase of \$286,422,000 over the current fiscal year. For purposes of reprogramming during fiscal year 2007, the Department may allocate funding among all operating accounts within Basic Energy Sciences, consistent with the reprogramming guidelines outlined earlier in this report.

Research.—The Committee recommendation includes \$1,004,212,000 for materials sciences and engineering, and \$268,499,000 for chemical sciences, geosciences, and energy biosciences. The Committee recommendation funds operations of the four completed nanoscale science research centers, instrumentation for the recently-completed Spallation Neutron Source (SNS), and the science research portion (\$50,000,000) of the hydrogen initiative at the requested levels. The Committee has directed the National Nuclear Security Administration to make available, from existing stocks, sufficient heavy water to meet SNS needs. Also included within this account is \$8,000,000 for the Experimental Program to Stimulate Competitive Research (EPSCoR), the same as the budget request.

Construction.—The Committee recommendation includes \$148,269,000 for Basic Energy Sciences construction projects, the same as the requested amount. The Committee recommendation provides the requested funding of: \$161,000 for completion of PED (03-SC-002) and \$105,740,000 to initiate construction of the Linac Coherent Light Source (05-SC-320) at the Stanford Linear Accelerator Center; \$18,864,000 to complete construction of the Center for Functional Nanomaterials (05-R-321) at Brookhaven National Laboratory; \$257,000 to complete construction of the Molecular Foundry (04-R-313) at Lawrence Berkeley National Laboratory; \$247,000 to complete construction of the Center for Integrated Nanotechnologies (03-R-313) at Los Alamos and Sandia National Laboratories; \$20,000,000 for PED for the National Synchrotron Light Source II (07-SC-06) at Brookhaven National Laboratory; and \$3,000,000 for PED for the Advanced Light Source User Support Building (07-SC-12) at Lawrence Berkeley National Laboratory.

ADVANCED SCIENTIFIC COMPUTING RESEARCH

The Committee recommendation is \$318,654,000, the same as the budget request and an increase of \$83,970,000 over the current fiscal year. The Committee commends the Office of Science and the Office of Advanced Scientific Computing Research for their efforts to provide cutting-edge capabilities to meet current scientific computational needs, and at the same time to extend the boundaries of that cutting edge into the next generation of high-performance scientific computers and supporting software

FUSION ENERGY SCIENCES

The Committee recommendation for fusion energy sciences is \$318,950,000, the same as the budget request. The Committee is pleased that the department finally requested sufficient funding for

the U.S. participation in the International Thermonuclear Experimental Reactor (ITER) Project without doing so at the expense of domestic fusion research activities or at the expense of other office of science programs.

The Committee strongly encourages the Office of Fusion Energy Sciences to invest adequately in fast ignition research and leverage the new facilities such as OMEGA-EP and FIREX-I in Japan to conduct critical research to explore the feasibility of this innovative concept. Also, the Committee is aware of the recent proposal from the Naval Research Laboratory for a fusion test facility; the Committee encourages the department to give serious consideration to providing office of science funding support in the future for these alternative approaches to fusion energy.

SCIENCE LABORATORIES INFRASTRUCTURE

The Committee recommendation provides a total of \$50,888,000 for Science Laboratories Infrastructure, the same as the budget request. Within the requested amount, the Committee transfers \$7,000,000 from the delayed demolition of the Bevatron at Lawrence Berkeley National Laboratory to the Physical Sciences Facility at the Pacific Northwest National Laboratory (project 07-SC-05) in order to accommodate the pending cleanup and closure of the 300 Area at the Hanford site. Within available funds, the Committee directs the Department to continue to make PILT payments associated with Argonne National Laboratory at \$246,000.

SAFEGUARDS AND SECURITY

The Committee recommends \$76,592,000, the same as the budget request, to meet additional safeguards and security requirements at Office of Science facilities.

SCIENCE WORKFORCE DEVELOPMENT

The Committee provides \$10,952,000 for workforce development for teachers and scientists in fiscal year 2007, the same as the requested amount. The Committee concurs with the proposed expansion of the laboratory science teacher professional development program.

SCIENCE PROGRAM DIRECTION

The Committee recommendation is \$170,877,000 for Science program direction, the same as the budget request. This amount includes: \$95,832,000 for program direction at DOE field offices and \$75,045,000 for program direction at DOE headquarters. The control level for fiscal year 2007 is at the program account level of Science Program Direction.

FUNDING ADJUSTMENTS

The Committee recommendation includes an offset of \$5,605,000 for the safeguards and security charge for reimbursable work, as proposed in the budget request.

DEPARTMENT OF ENERGY
 (AMOUNTS IN THOUSANDS)

	Enacted	Budget Request	House Recommended
NON-DEFENSE ENVIRONMENTAL CLEANUP			
West Valley Demonstration Project.....	76,329	73,400	73,400
Gaseous Diffusion Plants.....	48,325	74,860	74,860
Depleted Uranium Hexafluoride Conversion, 02-U-101....	84,945	32,556	32,556
Fast Flux Test Reactor Facility (WA).....	45,652	34,843	34,843
Small Sites:			
Argonne National Lab.....	10,382	10,726	11,726
Brookhaven National Lab.....	33,985	28,272	28,860
Idaho National Lab.....	5,221	7,000	7,000
Consolidated Business Center:			
California Site support.....	99	160	160
Inhalation Toxicology Lab.....	302	2,931	3,431
Lawrence Berkeley National Lab.....	3,861	---	---
Stanford Linear Accelerator Center.....	3,465	5,720	5,720
Energy Technology Engineering Center.....	8,910	16,000	16,000
Los Alamos National Lab.....	485	1,025	1,025
Moab.....	27,726	22,865	19,865
UMTRA site litigation.....	---	---	500
Subtotal, small sites.....	94,436	94,699	94,287
TOTAL, NON-DEFENSE ENVIRONMENTAL CLEANUP.....	349,687	310,358	309,946
URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND			
Decontamination and decommissioning.....	536,806	559,368	559,368
Uranium/thorium reimbursement.....	19,800	20,000	20,000
SUBTOTAL, URANIUM ENRICHMENT D&D FUND.....	556,606	579,368	579,368
Uranium sales and barter (scorekeeping adjustment)....	(3,000)	---	---
TOTAL, UED&D FUND/URANIUM INVENTORY CLEANUP.....	(556,606)	(579,368)	(579,368)
SCIENCE			
High energy physics			
Proton accelerator-based physics.....	388,172	376,536	376,536
Electron accelerator-based physics.....	131,494	117,460	117,460
Non-accelerator physics.....	38,203	59,271	59,271
Theoretical physics.....	48,612	52,056	52,056
Advanced technology R&D.....	110,213	159,476	159,476
Subtotal.....	716,694	764,799	764,799
Construction			
07-SC-07 Project engineering and design (PED)			
Electron neutrino appearance (EVA).....	---	10,300	10,300
Total, High energy physics.....	716,694	775,099	775,099
Nuclear physics.....	365,054	439,540	439,540
Construction			
07-SC-001 Project engineering and design (PED)			
12 GeV continuous electron beam accelerator facility upgrade, Thomas Jefferson National Accelerator facility, Newport News, VA.....	---	7,000	7,000

DEPARTMENT OF ENERGY
 (AMOUNTS IN THOUSANDS)

	Enacted	Budget Request	House Recommended
07-SC-002 Electron beam ion source Brookhaven National Laboratory, NY.....	---	7,400	7,400
06-SC-02 Project engineering and design (PED), Electron beam ion source, Brookhaven National Laboratory, Upton, NY.....	1,980	120	120
Total, Nuclear physics.....	367,034	454,060	454,060
Biological and environmental research.....	579,831	510,263	540,263
Basic energy sciences			
Research			
Materials sciences and engineering research.....	738,682	1,004,212	1,004,212
Chemical sciences, geosciences and energy biosciences.....	219,583	268,499	268,499
Subtotal, Research.....	958,265	1,272,711	1,272,711
Construction			
07-SC-06 Project engineering and design (PED) National Synchrotron light source II (NSLS-II)...	---	20,000	20,000
07-SC-12 Project engineering and design (PED) Advanced light source user building, LBNL.....	---	3,000	3,000
05-R-320 LINAC coherent light source (LCLS).....	82,170	105,740	105,740
05-R-321 Center for functional nanomaterials (BNL)	36,187	18,864	18,864
04-R-313 The molecular foundry (LBNL).....	9,510	257	257
03-SC-002 Project engineering & design (PED) SLAC.	2,519	161	161
03-R-313 Center for Integrated Nanotechnology.....	4,580	247	247
99-E-334 Spallation neutron source (ORNL).....	41,327	---	---
Subtotal, Construction.....	176,293	148,269	148,269
Total, Basic energy sciences.....	1,134,558	1,420,980	1,420,980
Advanced scientific computing research.....	234,684	318,654	318,654
Fusion energy sciences program.....	287,645	318,950	318,950
Science laboratories infrastructure			
Laboratories facilities support			
Infrastructure support.....	1,505	1,520	1,520
General plant projects.....	2,970	---	---
Construction			
07-SC-04 Science laboratories infrastructure project engineering and design (PED).....	---	8,908	8,908
04-SC-001 Project engineering and design (PED), various locations.....	2,970	---	---
03-SC-001 Science laboratories infrastructure MEL-001 Multiprogram energy laboratory infrastructure projects, various locations....	14,720	19,033	19,033
07-SC-05 Physical sciences facility at PNNL.....	---	---	7,000
Subtotal, Construction.....	17,690	27,941	34,941

DEPARTMENT OF ENERGY
(AMOUNTS IN THOUSANDS)

	Enacted	Budget Request	House Recommended
Subtotal, Laboratories facilities support.....	22,165	29,461	36,461
Oak Ridge landlord.....	5,028	5,079	5,079
Excess facilities disposal.....	14,491	16,348	9,348
Total, Science laboratories infrastructure.....	41,684	50,888	50,888
Safeguards and security.....	73,574	76,592	76,592
Workforce development for teachers and scientists.....	7,120	10,952	10,952
Science program direction			
Field offices.....	90,677	95,832	95,832
Headquarters.....	68,441	75,045	75,045
Total, Science program direction.....	159,118	170,877	170,877
Subtotal, Science.....	3,601,942	4,107,315	4,137,315
Less security charge for reimbursable work.....	-5,549	-5,605	-5,605
TOTAL, SCIENCE.....	3,596,393	4,101,710	4,131,710
NUCLEAR WASTE DISPOSAL			
Repository program.....	19,800	80,986	80,986
Interim storage.....	---	---	30,000
Program direction.....	79,200	75,434	75,434
Integrated spent fuel recycling.....	49,500	---	---
TOTAL, NUCLEAR WASTE DISPOSAL.....	148,500	156,420	186,420
DEPARTMENTAL ADMINISTRATION			
Administrative operations			
Salaries and expenses			
Office of the Secretary.....	5,345	5,539	5,539
Board of contract appeals.....	642	147	147
Chief financial officer.....	---	36,790	36,790
Management.....	---	55,237	55,237
Human capital management.....	---	22,029	22,029
Chief information officer.....	38,991	47,722	47,722
Congressional and intergovernmental affairs.....	4,778	4,866	4,866
Economic impact and diversity.....	5,298	5,144	5,144
General counsel.....	22,985	24,725	24,725
Office of Management, Budget and Evaluation.....	108,207	---	---
Policy and international affairs.....	14,843	18,744	18,744
Public affairs.....	4,459	4,419	4,419
Subtotal, Salaries and expenses.....	205,548	225,362	225,362
Program support			
Minority economic impact.....	815	825	825
Policy analysis and system studies.....	388	612	612
Environmental policy studies.....	556	520	520
Cybersecurity and secure communications.....	24,486	38,183	38,183
Corporate management information program.....	22,824	22,917	22,917
Subtotal, Program support.....	49,069	63,057	63,057
Competitive sourcing initiative (A-76).....	2,455	2,982	2,982