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106TH CONGRESS, 2d Session | SENATE | REPORT 106–395

ENERGY AND WATER DEVELOPMENT APPROPRIATION BILL, 2001

AUGUST 30, 2000.—Ordered to be printed

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Mr. DOMENICI, from the Committee on Appropriations, submitted the following

REPORT

[To accompany H.R. 4733]

The Committee on Appropriations, to which was referred the bill (H.R. 4733) making appropriations for energy and water development for the fiscal year ending September 30, 2001, and for other purposes, reports the same to the Senate with an amendment and recommends that the bill as amended do pass.

Amount in new budget (obligational) authority, fiscal year 2001

Budget estimates considered by Senate	$23,153,068,000
Amount of bill as reported to the Senate	22,918,441,000
The bill as reported to the Senate—	
Below the budget estimate, 2001	234,627,000
Over enacted bill, 2000	1,271,394,000

66–386 cc

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SCIENCE

Appropriations, 2000	$2,787,627,000
Budget estimate, 2001	[1] 3,162,639,000
House allowance	2,830,915,000
Committee recommendation	2,870,112,000

[1] Reflects budget amendment contained in H. Doc. 106–251 for Safeguards and Security.

Severely constrained spending limits for fiscal year 2001 have forced the Committee into very difficult decisions regarding many otherwise outstanding programs and initiatives under the Office of Science. In order to adhere to the subcommittee's allocation, address critical ongoing research and development efforts, and balance congressional priorities with those of the administration, the Committee regrets that it is not able to recommend many of the substantial increases requested for programs, and in some cases, had to cut programs below current year levels. Furthermore, the Committee regrets that it cannot recommend funding for many worthwhile new initiatives.

HIGH ENERGY PHYSICS

Appropriations, 2000	$707,890,000
Budget estimate, 2001	[1] 709,272,000
House allowance	714,730,000
Committee recommendation	677,030,000

[1] Reflects budget amendment contained in H. Doc. 106–251 for Safeguards and Security.

Due to severe budget restraints, the Committee recommendation provides $677,030,000 for high energy physics, a reduction of $30,860,000 from the current year appropriation.

The Committee strongly supports the goals of the high energy physics program and reductions to the accounts are made without prejudice and as a result of the severe budget constraints within which it must provide funding. As such, the Committee directs the Department to allocate the resources provided in full consultation with the field and without prejudice to any site.

NUCLEAR PHYSICS

Appropriations, 2000	$352,000,000
Budget estimate, 2001	[1] 365,069,000
House allowance	369,890,000
Committee recommendation	350,274,000

[1] Reflects budget amendment contained in H. Doc. 106–251 for Safeguards and Security.

Due to severe budget restraints, the Committee recommendation for nuclear physics is $350,274,000, a reduction of $19,616,000 from the original request. The Committee recommendation does not provide $5,957,000 requested for the waste treatment program and directs the Department to achieve efficiencies in waste treatment by charging the costs to users where appropriate, or handling such costs within existing operational budgets. Due to budget constraints, funding for new research initiatives is reduced by $5,659,000, and funding for increased facility operations is reduced by $8,000,000.

BIOLOGICAL AND ENVIRONMENTAL RESEARCH

Appropriations, 2000	$441,500,000
Budget estimate, 2001	[1] 438,454,000
House allowance	404,000,000
Committee recommendation	444,000,000

[1] Reflects budget amendment contained in H. Doc. 106–251 for Safeguards and Security.

The Committee recommendation includes $444,000,000 for biological and environmental research including $2,500,000 for construction of the laboratory for Comparative and Functional Genomics at Oak Ridge National Laboratory. The recommendation for research is at the same level as the current year appropriation. The Committee recommendation does not provide $1,200,000 requested for waste management and directs the Department to achieve efficiencies in waste management by charging the costs to users where appropriate, or handling such costs within existing operational budgets. The recommendation does not include the proposed $9,507,000 increase to fund new initiatives to image the expression of genes in cells and does not support the development of new infrastructure and facilities to support this initiative. Due to severe budget constraints, the recommendation includes $4,735,000 requested for new initiatives in the Microbial Cell Project, a reduction of $5,000,000 from the request; and continues the free air carbon dioxide experiments at the current year level.

Low dose effects program.—The Committee recommendation includes $20,135,000, of which $11,682,000 is within biological and environmental research and $8,453,000 is within defense environmental restoration and waste management science and technology for the low dose effects program.

Medical Applications.—The Committee recognizes the University of Missouri-Columbia's commitment to building a state-of-the-art cancer research and treatment program and provides $3,000,000 to expand the Federal investment in the University's nuclear medicine and cancer research capital program begun by the Committee last year, focusing on the enhancement of the campus' clinical cancer treatment and research facilities.

BASIC ENERGY SCIENCES

Appropriations, 2000	$783,127,000
Budget estimate, 2001	[1] 1,003,920,000
House allowance	791,000,000
Committee recommendation	914,582,000

[1] Reflects budget amendment contained in H. Doc. 106–251 for Safeguards and Security.

The Committee recommendation includes $914,582,000 for basic energy sciences, an increase of $131,455,000 over the current year appropriation.

Materials sciences.—The Committee recommendation provides $408,363,000 for materials sciences, a $3,363,000 increase over the current year appropriation and $47,748,000 below the budget request. The Committee recommendation includes the amount of the request, $9,815,000, for the Department's Experimental Program to Stimulate Competitive Research. The Committee recommendation does not provide $8,073,000 requested for waste management and directs the Department to achieve efficiencies in waste manage-

ment by charging the costs to users where appropriate, or handling such costs within existing operational budgets. The Committee recommendation does not include $8,000,000 for the SPEAR 3 upgrade at the Stanford Synchrotron Radiation Laboratory. The Committee recommendation includes $203,596,000 for facility operations, the same amount as the current year and $23,675,000 below the request.

Spallation neutron source.—The Committee recommendation provides $241,000,000 to continue the Spallation Neutron Source (SNS), including $221,900,000 for construction and $19,100,000 for other activities related to the project. The amount represents a $121,900,000 increase over current year construction funding. The Committee recognizes the importance the SNS offers in advancing the frontiers of science and technology and the opportunities it will provide for future scientific and industrial research and development for the United States. The design and construction of this next-generation, accelerator-based, neutron scattering facility, located at the Oak Ridge National Laboratory, is a collaborative effort involving six DOE national laboratories (Argonne, Brookhaven, Jefferson, Lawrence Berkeley, Los Alamos, and Oak Ridge). Due to the allocated budget constraints, the Committee is unable to provide the full budget request. The Committee endorses and supports the SNS as it enters the construction phase and hopes additional resources can be made available so as to limit any impact on the project's schedule and cost.

Nanotechnology.—The Committee strongly supports the Department's role in the government-wide investment in nanotechnology and recognizes it may revolutionize the ability to craft highly specialized materials with unique properties. The Department has requested an increase of $36,140,000 over the current year appropriation for new initiatives in this areas. Due to severe budget constraints, the Committee recommendation provides only $20,140,000 for new initiatives in nanoscale science, engineering, and technology research, a reduction of $16,000,000 from the request, but a significant increase over last year. The reductions in nanotechnology research are taken from the following sub accounts: $8,000,000 from materials sciences; $7,000,000 from chemical sciences; and $1,000,000 from engineering and geosciences.

Energy biosciences.—Due to severe budget constraints, the Committee recommendation does not provide funding for the $2,440,000 in new research initiatives for microbial cell research, as funding is already provided under biological and environmental research.

OTHER ENERGY RESEARCH PROGRAMS

Appropriations, 2000	$166,060,000
Budget estimate, 2001	211,362,000
House allowance	171,930,000
Committee recommendation	174,900,000

The Committee recommendation provides $174,900,000 for other energy research programs, an increase of $8,840,000 over the current year appropriation.

Advanced Scientific Computing Research.—The Committee recommendation provides $139,970,000 for advanced scientific computing research, an increase of $7,970,000 over the current year

level of funding. The Department requested an increase of $50,611,000 over current year spending to support substantial new investments in scientific computing. The Committee recognizes the need for enhanced scientific computing capabilities within the Department's science programs, but is unable to support such a large increase given current budget constraints. The Committee recommendation does not provide $11,963,000 requested for the laboratory technology research program, and instead provides the entire recommended amount of $139,970,000 to mathematical, information, and computational sciences, an increase of $20,899,000 over current year funding, and directs the Department to accordingly initiate the most important new scientific computing initiatives.

FUSION ENERGY SCIENCES

Appropriations, 2000	$250,000,000
Budget estimate, 2001	[1] 243,907,000
House allowance	255,000,000
Committee recommendation	227,270,000

[1] Reflects budget amendment contained in H. Doc. 106–251 for Safeguards and Security.

The Committee recommendation for fusion energy sciences is $227,270,000, a reduction of $22,730,000 from the current year appropriation. While, in the past, the Committee has supported increases above the level of the request for this program, severe budget constraints and shortfalls elsewhere in the Department's request necessitate the reduction at this time.

Transfer from USEC	.....	.....	−12,000	.....
TOTAL, URANIUM FACILITIES MAINTENANCE AND REMEDIATION	.....	.....	301,400	.....
SCIENCE				
High energy physics:				
Research and technology	229,190	236,000	224,820	216,020
Facility operations	450,000	440,872	457,510	428,610
Construction:				
00–G–307 SLAC office building	2,000	5,200	5,200	5,200
99–G–306 Wilson hall safety improvements, Fermilab	4,700	4,200	4,200	4,200
98–G–304 Neutrinos at the main injector, Fermilab	22,000	23,000	23,000	23,000
Subtotal, Construction	28,700	32,400	32,400	32,400
Subtotal, Facility operations	478,700	473,272	489,910	461,010
Total, High energy physics	707,890	709,272	714,730	677,030
Nuclear physics	352,000	365,069	369,890	350,274
Biological and environmental research	441,500	435,954	404,000	441,500
01–E–300 Laboratory for Comparative and Functional Genomics, ORNL	.....	2,500	.....	2,500
Total, Biological and environmental research	441,500	438,454	404,000	444,000
Basic energy sciences:				
Materials sciences	405,000	448,964	413,000	408,363
Chemical sciences	209,582	219,090	209,000	216,229
Engineering and geosciences	37,545	40,304	38,000	39,816
Energy biosciences	31,000	33,662	31,000	28,274
Construction: 99–E–334 Spallation neutron source (ORNL)	100,000	261,900	100,000	221,900
Total, Basic energy sciences	783,127	1,003,920	791,000	914,582
Other energy research:				
Advanced scientific computing research	132,000	179,817	137,000	139,970
Energy research analyses	1,000	988	1,000	1,000

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

Project title	Current year enacted	Budget estimate	House allowance	Committee recommendation
Multiprogram energy labs—facility support:				
Infrastructure support	2,160	1,023	1,160	1,160
Oak Ridge landlord	11,800	7,475	10,711	10,711
Construction: MEL–001 Multiprogram energy laboratory infrastructure projects, various locations	18,351	22,059	22,059	22,059
Multiprogram general purpose facilities:				
Construction: 94–E–363 Roofing improvements (ORNL)	749	.....	.....	.....
Subtotal, Multiprogram energy labs	33,060	30,557	33,930	33,930
Total, Other energy research	166,060	211,362	171,930	174,900
Fusion energy sciences program	250,000	243,907	255,000	227,270
Safeguards and security	.....	49,818	.....	.....
Program direction:				
Field offices	78,748	82,929	82,062	78,307
Headquarters	52,360	51,408	51,438	51,438
Science education	.....	6,500	4,500	3,000
Total, Program direction	131,108	140,837	138,000	132,745
Subtotal, Science	2,831,685	3,162,639	2,844,550	2,920,801
Across-the-board cut (.38 percent) (Public Law 106–113)	−12,224	.....	.....	.....
Contractor travel savings	−10,834	.....	.....	.....
General reduction	−21,000	.....	−13,635	−50,689
TOTAL, SCIENCE	2,787,627	3,162,639	2,830,915	2,870,112
DEPARTMENTAL ADMINISTRATION				
Administrative operations:				
Salaries and expenses:				
Office of the Secretary	4,940	6,648	5,000	6,648