# ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, 2001

June 23, 2000.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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

# REPORT

together with

# ADDITIONAL VIEWS

[To accompany H.R. 4733]

The Committee on Appropriations submits the following report in explanation of the accompanying bill making appropriations for energy and water development for the fiscal year ending September 30, 2001, and for other purposes.

#### INDEX TO BILL AND REPORT

	Page Number	
	Bill	Report
Introduction	•••••	4
I. Department of Defense—Civil:		
Corps of Engineers—Civil:		
Introduction		5
General Investigations	$^{2}$	6
Construction, general	3	31
Flood control, Mississippi River and tributaries, Arkansas, Il-		
linois, Kentucky, Louisiana, Mississippi, Missouri, and		
Tennessee	5	45
Operation and maintenance, general	5	48
Regulatory program	6	64
Formerly Utilized Sites Remedial Action Program	8	65
General expenses	8	65
Revolving Fund	9	65
Administrative provisions	9	
General Provisions	9	66
II. Department of the Interior:		
Central Utah Project completion account	10	67
05 105		

	Page $N$	lumber
	Bill	Report
Bureau of Reclamation:		
Water and related resources	11	67
Bureau of Reclamation loan program account	13	77
Central Valley Project restoration fund	14	79
California Bay-Delta ecosystem restoration		79
Policy and administration	14	80
Administrative provision	15	
General Provisions	15	80
III. Department of Energy:		
Introduction		
Energy supply	16	
Non-defense environmental management	17	91
Uranium enrichment decontamination and decommissioning fund		91
Uranium facilities maintenance and remediation	17	91
Science	17	93
Nuclear waste disposal	18	97
Departmental administration	20	98
Office of the Inspector General	$\frac{20}{21}$	100
	21	100
Atomic energy defense activities:		100
National Nuclear Security Administration		100
Weapons activities	21	101
Defense nuclear nonproliferation	21	104
Naval reactors	22	110
Defense environmental restoration and waste management	22	111
Defense facilities closure projects	23	115
Defense environmental management privatization	23	117
Other defense activities	24	117
Defense nuclear waste disposal	24	120
Power marketing administrations:		
Bonneville Power Administration	24	121
Southeastern Power Administration	25	123
Southwestern Power Administration	26	123
Western Area Power Administration	27	124
Falcon and Amistad operating and maintenance fund	28	124
Federal Energy Regulatory Commission	28	125
General Provisions	29	136
IV. Independent agencies:	20	100
Appalachian Regional Commission	33	139
Defense Nuclear Facilities Safety Board	33	139
		139
Delta Regional Authority		
Denali Commission		140
Nuclear Regulatory Commission	34	140
Office of Inspector General	35	141
Nuclear Waste Technical Review Board	35	142
V. Rescissions	36	143
VI. General provisions	36	145
House reporting requirements		147

# SUMMARY OF ESTIMATES AND RECOMMENDATIONS

The Committee has considered budget estimates which are contained in the Budget of the United Stats Government, 2001. The following table summarizes appropriations for fiscal year 2000, the budget estimates, and amounts recommended in the bill for fiscal year 2001.

# SCIENCE

Appropriation, 2000	\$2,787,627,000
Budget Estimate, 2001	3,151,065,000
Recommended, 2001	2,830,915,000
Comparison:	
Appropriation, 2000	+43,288,000
Budget Estimate, 2001	-320,150,000

The Science account includes the following programs: high energy and nuclear physics; biological and environmental research; basic energy sciences; advanced scientific computing research; energy research analysis; multi-program energy laboratories facility support; fusion energy sciences; and program direction. Due to severe funding constraints, the Committee was unable to provide the significant budget increases requested by the Department in fiscal year 2001. It has been necessary to defer many on-going programs and new initiatives which the Committee views very favorably and regrets being unable to fund.

Statutory language proposed by the Administration to provide advance appropriations through fiscal year 2005 for the Spallation Neutron Source has not been included.

Coordination of Basic Research.—The Committee is concerned that there is scant cooperation and coordination between the Office of Science and the Office of Energy Efficiency and Renewable Energy on the fundamental research needed to improve renewable energy technologies. Each year the Committee provides funding for the Office of Science to support basic research in energy programs, including renewable programs. There appears to be little coordination or consultation between the two offices on the synergies among these programs. The Committee directs these two offices to identify ways in which coordination can be improved and research con-

ducted which is mutually beneficial, and to inform the Committee how coordination will be improved.

## HIGH ENERGY PHYSICS

The high energy physics program of the Department of Energy has the lead responsibility for Federal support of high energy physics research. The program is directed at understanding the nature of matter and energy at the most fundamental level and the basic forces which govern all processes in nature. Fundamental research provides the necessary foundation that ultimately enables the Nation to progress in its science and technology capabilities, to advance its industrial competitiveness, and to discover new and innovative approaches to our energy future.

The Committee's recommendation for high energy physics is \$714,730,000, the same as the budget request, and an increase of

\$6,840,000 over fiscal year 2000.

Research and technology.—The Committee recommendation for research and technology is \$224,820,000, a reduction of \$12,900,000 from the budget request of \$237,720,000. For fiscal year 2001 the Department requested \$19,200,000 for research and development on the Next Linear Collider and \$8,700,000 for research and development on the Muon-Muon Collider. Due to severe funding constraints, the recommendation limits funding for these two activities to a total of \$15,000,000. With the funding constraints on operating existing facilities and the need to fund major science projects currently under construction, the Committee is not anxious at this time to fund designs for expensive new facilities.

Facility operations.—The Committee recommendation for facility operations is \$489,910,000, an increase of \$12,900,000 over the budget request of \$477,010,000. The Department requested \$207,031,000 in fiscal year 2001 for facility operations at the Fermi National Accelerator Laboratory in Batvia, Illinois. This level of funding would severely impact on-going operations at Fermi, so the Committee has provided \$230,931,000, an additional \$23,900,000,

for Fermi operations in fiscal year 2001.

The Committee recommendation for the Large Hadron Collider (LHC) is \$59,000,000, a reduction of \$11,000,000 from the budget request of \$70,000,000. Funding is available since obligations for the LHC have been slower than anticipated, and there will be no negative impact on the project.

## NUCLEAR PHYSICS

The goal of the nuclear physics program is to support basic research scientists, develop and operate the facilities, and foster the technical and scientific activities needed to understand the structure and interactions of atomic nuclei, and the fundamental forces and particles of nature as manifested in nuclear matter. The Committee recommendation for nuclear physics is \$369,890,000, the same as the budget request, and an increase of \$17,890,000 over fiscal year 2000.

## BIOLOGICAL AND ENVIRONMENTAL RESEARCH

The biological and environmental research program provides fundamental science to develop the knowledge needed to identify, understand, anticipate, and mitigate the long-term health and environmental consequences of energy production, development, and use.

The Committee recommendation is \$404,000,000, a reduction of \$41,260,000 from the budget request of \$445,260,000, and \$37,500,000 below fiscal year 2000. Due to severe funding constraints, the Committee was unable to provide the requested level of funding for this program. While this appears to be a significant reduction from fiscal year 2000, it is actually comparable when funding is adjusted for the additional projects which were added to the program in fiscal year 2000.

Construction and infrastructure.—The Committee has deferred without prejudice funding to initiate construction of the Laboratory for Comparative Functional Genomics at the Oak Ridge National Laboratory. The Committee has also deferred funding to develop facilities and infrastructure at the University of South Carolina School of Public Health.

#### BASIC ENERGY SCIENCES

The Committee recommendation for basic energy sciences is \$791,000,000, a reduction of \$224,770,000 from the budget request, and an increase of \$7,873,000 over fiscal year 2000. Due to severe funding constraints, the Committee was unable to provide the requested level of funding for this program. It has been necessary to defer funding for many new initiatives which the Committee views very favorably.

For purposes of reprogramming during fiscal year 2001, the Department may reallocate funding among all operating accounts in basic energy sciences. The recommendation includes \$6,815,000, the same as last year, for the Experimental Program to Stimulate Competitive Research (EPSCoR) program, and provides an increase of \$7,873,000 to fund new waste management activities transferred to the program in fiscal year 2001.

Spallation Neutron Source.—The Committee recommendation provides \$100,000,000, a reduction of \$161,900,000 from the budget request of \$261,900,000, and the same level as fiscal year 2000 for construction of the Spallation Neutron Source. The Committee is aware that the Department has made significant progress in improving the management of the project in the past year. The funding reduction does not reflect concern with the current status of the project, but rather the severe funding constraints under which the Committee is operating in fiscal year 2001.

## ADVANCED SCIENTIFIC COMPUTING RESEARCH

The goal of the Advanced Scientific Computing Research (ASCR) program is to discover, develop, and deploy the computational and networking tools that enable researchers in the scientific disciplines to analyze, model, simulate, and predict complex phenomena.

The Committee recommendation is \$137,000,000, a reduction of \$44,970,000 from the budget request, but an increase of \$5,000,000 over fiscal year 2000. The Committee is aware that the Department has worked hard to develop an advanced computing program to meet the needs of the science programs and laboratories. However, severe funding constraints make it impossible to fund a large new computing program in fiscal year 2001. The recommendation includes \$5,000,000 for computer equipment upgrades at the National Energy Research Scientific Computing Center (NERSC) at the Lawrence Berkeley National Laboratory.

# ENERGY RESEARCH ANALYSIS

The energy research analysis program assesses research projects and programs and seeks to identify undesirable duplications and gaps. The Committee recommendation for energy research analysis is \$1,000,000, the same as the budget request.

#### MULTI-PROGRAM ENERGY LABORATORIES FACILITIES SUPPORT

The multi-program energy laboratories facilities support program provides funding for general purpose facilities to support the infrastructure of the five Office of Science multi-program national laboratories and Oak Ridge, Tennessee, landlord costs. The Committee recommendation for multi-program energy laboratories facilities support is \$33,930,000, the same as the budget request.

## FUSION ENERGY SCIENCES

The Committee recommendation for fusion energy sciences is \$255,000,000, an increase of \$7,730,000 over the budget request, and the same as fiscal year 2000. Additional funding of \$25,000,000 has been provided in the inertial confinement fusion program in the Weapons Activities appropriation account to support work on the development of high average power lasers.

Funds for this program should be allocated in accordance with the Fusion Energy Science Advisory Committee's (FESAC) report on Balance and Priorities. The Committee is pleased that the FESAC review process seems to be positioning the U.S. program to take advantage of the much larger international fusion research effort with the resources available and also positions the program to accelerate the development of fusion energy.

The Committee recommendation includes the budget request of \$19,600,000 for decontamination and decommissioning of the Tokomak Fusion Test Reactor (TFTR).

#### PROGRAM DIRECTION

The Committee recommendation for program direction is \$138,000,000, a reduction of \$3,245,000 from the budget request. Funding of \$4,500,000, the same as last year, has been provided for the science education program.

#### FUNDING ADJUSTMENTS

The recommendation for Science includes a general reduction of \$13,635,000 due to funding constraints.

# DEPARTMENT OF ENERGY (IN THOUSANDS OF DOLLARS)

	FY 2000 ENACTED	BUDGET ESTIMATE	HOUSE ALLOWANCE
URANIUM FACILITIES MAINTENANCE AND REMEDIATION			
Uranium Enrichment Decontamination and Decommissioning			
Fund Decontamination and decommissioning Uranium/thorium reimbursement			230,000 30,000
Total, Uranium enrichment D&D fund			260,000
Other Uranium Activities Maintenance of facilities and inventories Pre-existing liabilities Depleted UFG conversion project			29,193 11,330 12,877
Total, Other uranium activities			53,400
Subtotal, Uranium facilities maint & remediation			313,400
Transfer from USEC			-12,000
TOTAL, URANIUM FACILITIES MAINTENANCE AND			301,400
REMEDIATION			301,400
SCIENCE			
High energy physics Research and technology	229,190	237,720	224,820
Facility operations	450,000	444,610	457,510
Construction 00-G-307 SLAC office building	2,000	5,200	5,200
99-G-306 Wilson hall safety improvements, Fermilab	4,700	4,200	4,200
98-G-304 Neutrinos at the main injector, Fermilab	22,000	23,000	23,000
Subtotal, Construction	28,700	32,400	32,400
Subtotal, Facility operations	478,700	477,010	489,910
Total, High energy physics	707,890	714,730	714,730
Nuclear physics	352,000	369,890	369,890
Biological and environmental research	441,500	442,760	404,000
O1-E-300 Laboratory for Comparative and Functional Genomics, ORNL		2,500	
Total, Biological and environmental research	441,500	445,260	404,000
Basic energy sciences Materials sciences. Chemical sciences. Engineering and geosciences. Energy biosciences. Construction	405,000 209,582 37,545 31,000	456,111 223,229 40,816 33,714	413,000 209,000 38,000 31,000
99-E-334 Spallation neutron source (ORNL)	100,000	261,900	100,000
Total, Basic energy sciences	783,127	1,015,770	791,000
Advanced scientific computing research	132,000 1,000	181,970 1,000	137,000 1,000
Multiprogram energy labs – facility support Infrastructure support	2,160	1,160 10,711	1,160 10,711
MEL-001 Multiprogram energy laboratory infrastructure projects, various locations	18,351	22,059	22,059
Multiprogram general purpose facilities Construction 94-E-363 Roofing improvements (ORNL)	749		
Total, Multiprogram energy labs - fac. support		33,930	33,930
Fusion energy sciences programSafeguards and security	250,000	247,270	255,000
Program direction Field offices Headquarters	78,748 52,360	83,307 51,438	82,062 51,438

## DEPARTMENT OF ENERGY (IN THOUSANDS OF DOLLARS)

FY ENA	2000 BU	DGET H	OUSE ANCE
Science education		6,500	4,500
Total, Program direction	131,108	141,245	138,000
Subtotal, Science	2,831,685	3,151,065	2,844,550
Across-the-board cut (.38%) (P.L. 106-113)	-12,224 -10,834 -21,000		-13,635
TOTAL, SCIENCE	2,787,627	3,151,065	2,830,915
DEPARTMENTAL ADMINISTRATION			
Administrative operations Salaries and expenses Office of the Secretary. Board of contract appeals. Chief financial officer. Contract reform. Congressional and intergovernmental affairs. Economic impact and diversity. Field management. General counsel. International affairs. Management and administration. Policy office. Public affairs. Subtotal, Salaries and expenses.	838 26,000 3,000 4,910 4,700 1,000 20,750 98,000 14,000 3,700	5,731 830,748 2,500 5,146 5,126 22,724 9,400 78,689 6,688 4,150	5,000 878 28,000 2,500 5,000 5,100 7,000 77,000 6,600 3,900
Program support Minority economic impact Policy analysis and system studies Environmental policy studies. Scientific and technical training Corporate management information program. Subtotal, Program support.	1,700 350 1,000 450	1,500 422 1,600  12,000	1,500 422 1,000  12,000
Total, Administrative operations	197,338	187,312	178,500
Cost of work for others		34,027	34,027
Subtotal, Departmental Administration		221,339	212,527
Across—the—board cut (.38%) (P.L. 106—113)	-784 -15.000	-8,000	-8,000 -51,000
Total, Departmental administration (gross)	205,581	213,339	153,527
Miscellaneous revenues	-106,887	-128,762	-111,000
TOTAL, DEPARTMENTAL ADMINISTRATION (net)	98,694	84,577	42,527
OFFICE OF INSPECTOR GENERAL			
Office of Inspector General	29,500	33,000	31,500
ATOMIC ENERGY DEFENSE ACTIVITIES			
NATIONAL NUCLEAR SECURITY ADMINISTRATION			
WEAPONS ACTIVITIES			
Stewardship operation and maintenance Core stockpile stewardshipStockpile management	1,610,355 1,804,621		
Directed stockpile work Stockpile research and development Stockpile maintenance. Stockpile evaluation. Dismantlement/disposal Production support. Field engineering, training and manuals.		243,300 257,994 151,710 29,260 149,939 4,400	243,300 266,994 162,710 29,260 149,939 4,400
Subtotal, Directed stockpile work		836,603	856,603
Campaigns Primary certification Dynamic materials properties	 	41,400 64,408	41,400 64,408