

account. The total funding recommended for program direction is the same as the fiscal year 1999 budget request.

#### FUSION ENERGY SCIENCES

The Committee recommendation is \$232,000,000, a \$3,840,000 increase over the budget request. The Committee continues to be very supportive of the increased emphasis on innovative confinement concepts and university-based experiments. The Committee encourages the Department to provide sufficient resources for these efforts. In particular, special emphasis should be placed on funding operations, upgrades, and enhanced design work on both existing research and proposals for new alternative concept experiments at the proof-of-principle level.

In addition to magnetic fusion, there are several promising technologies that have potential for producing electricity. The Department is directed to comprehensively review all known technologies and submit a program plan that includes activities funded in this account and potentially-related activities funded elsewhere in the Department. Recognizing the significant advances in Inertial Confinement Fusion (ICF) sponsored by the national security program, the Committee strongly supports the complementary work to be funded in this account including heavy-ion drivers, high gain target concepts, and reactor concepts.

*International Thermonuclear Experimental Reactor.*—The Congress has been very clear that no obligation exists for future participation in ITER beyond the fiscal year 1998 contribution for engineering and design activities (EDA). The Committee is concerned about the recent announcement that the Department has already proposed to enter into a new agreement to start engineering and design of a newly-conceived, less costly reactor: "ITER-Lite". The Committee observes that the proponents of ITER have seized upon only one of the concerns the Congress has about ITER. The Committee continues to question whether the tokamak is the most promising technology and whether the current partners in ITER are willing and able to meet their commitments. The Committee observes that after ten years and a U.S. contribution of \$345 million, the partnership has yet to even select a site for this construction project. The Committee objects to the proposed extension of the EDA and has not provided any additional funds for ITER, ITER-Lite or the Joint Central Team. The Department may use prior year funds for closeout costs related to ITER.

*Tokamak Fusion Test Reactor (TFTR).*—In fiscal year 1997, Congress terminated funding for the TFTR. The Committee notes that TFTR has ceased operation and that many parts of the TFTR facility will be re-used for the new National Spherical Torus Experiment. Currently, the Department is spending approximately \$4,000,000 annually for care-taking of the remaining TFTR components. The Department has no immediate plans for the decommissioning of the TFTR unit, proposing to continue care-taking expenses indefinitely. The Committee has been made aware of decommissioning proposals to complete decommissioning in three years, with estimated savings of \$25,000,000. The Committee directs the Department to prepare a reasonable, timely and cost-effective decommissioning plan and to submit this plan with the fiscal year

2000 budget request. The Department shall consult with the Princeton Plasma Physics Laboratory throughout the development of this plan.

#### ENERGY SUPPORT ACTIVITIES

—The Committee recommendation for Energy Support Activities is \$105,100,000, a \$21,781,000 reduction from the amount requested. The recommendation includes the Department's proposal to remove responsibility for funding Oak Ridge landlord activities from the Office of Nuclear Energy to the Office of Chief Financial Officer.

*Technical information management program.*—The Committee recommendation is \$9,100,000, a reduction of \$1,000,000 from the current fiscal year. The reduction reflects the elimination of construction funding as recommended in the budget request. The Department is directed to reduce the redundancy currently found between its database and the National Technical Information Service database maintained by the Department of Commerce. The Committee supports the continued downsizing of this program and directs that the Department provide a program plan detailing the program and funding requirements anticipated through fiscal year 2002.

*Field offices.*—The Committee recommendation is \$85,000,000, a reduction of \$10,000,000 from the amount provided for the current fiscal year. The Committee has provided funding for Federal employees at the Idaho field office in the Environmental Management program direction account.

*Oak Ridge landlord.*—The Committee recommendation of \$11,000,000 reflects a reduction of \$1,500,000 as a result of the reprogramming approved by the Committee on March 16, 1998.

#### FUNDING ADJUSTMENTS

The recommendation includes two funding adjustments. The \$47,905,000 adjustment represents the funding provided for renewable energy research programs managed by the Office of Energy Research and funded in the Science account. The \$31,535,000 adjustment for prior year balances reflects the availability of funds appropriated in prior years that have not yet been costed or obligated. This is the same amount identified as available in the current fiscal year.

#### ANNUAL APPROPRIATIONS

Last year, Congress made a change to provide funding for this account on an annual basis (appropriation expires at the end of the fiscal year) rather than providing "no-year" funds which are made available until expended. The Committee cited the Department's continuation of programs eliminated by Congress and other inappropriate reprogrammings of funds appropriated in prior years. While the continuation of these spending programs does not violate the law, it certainly violates the clear intent of Congress.

It has come to the attention of the Committee that there is a potential contracting problem associated with the change to annual appropriations. The Committee notes that there are specific remedies for multi-year procurements in the law. The Committee is

URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING  
FUND

Appropriation, 1998— .....	\$220,200,000
Budget Estimate, 1999— .....	277,000,000
Recommended, 1999— .....	225,000,000
Comparison:	
Appropriation, 1998— .....	4,800,000
Budget Estimate, 1999— .....	- 52,000,000

The Uranium Enrichment Decontamination and Decommissioning (D&D) Fund supports D&D, remedial actions, waste management, and surveillance and maintenance associated with preexisting conditions at sites leased and operated by the United States Enrichment Corporation (USEC), as well as Department of Energy facilities at these and other uranium enrichment sites. The sites covered by this D&D Fund include the operating uranium enrichment facilities at Portsmouth, Ohio, and Paducah, Kentucky, and the inactive K-25 site in Tennessee, formerly called the Oak Ridge Gaseous Diffusion Plant. Environmental restoration efforts at these three sites are supported from the D&D Fund established by a tax on domestic utilities and by Congressional appropriations. In fiscal year 1999, the Department of Energy will transfer \$398,088,000 into this Fund.

The Committee recommends \$225,000,000, a reduction of \$52,000,000 from the budget request of \$277,000,000. Due to severe budget constraints, the Committee was unable to provide the budget request for this program, but the recommendation is an increase of \$4,800,000 over fiscal year 1998. The Committee understands that this will limit funding for activities related to immediate cleanup of the gaseous diffusion plants. The Committee encourages the Department to review all costs included in the UED&D program and seek to minimize those of lesser priority. The Committee continues to believe there are many efficiencies to be made in all areas of the environmental management program.

The Committee recommendation includes \$30,000,000, a reduction of \$5,000,000 from the budget request of \$35,000,000, to implement the reimbursement program authorized under Title X, subtitle A of the Energy Policy Act for active uranium and thorium processing sites which sold uranium and thorium to the United States Government. This program is to assist site owners by compensating them on a per ton basis for the restoration and disposal costs of those mill tailings resulting from sale of materials to the government.

SCIENCE

Appropriation, 1998 .....	\$2,235,708,000
Budget Estimate, 1999 .....	2,482,460,000
Recommended, 1999 .....	2,399,500,000
Comparison:	
Appropriation, 1998 .....	163,792,000
Budget Estimate, 1999 .....	- 82,960,000

The Science account includes the following programs: high energy and nuclear physics; biological and environmental research; basic energy sciences; computational and technology research and other research-related programs. The Committee continues its very

strong support for these basic science programs. While the Committee has eliminated many Department of Energy programs and substantially reduced funding for others, the Committee has provided generous increases for physics programs and other basic research activities funded under this account.

—The Committee has taken extraordinary steps to provide the increases included in this recommendation. This year, the Committee was forced to reduce net funding for domestic programs by over four hundred million dollars. In addition, the Committee had to identify an additional \$27,400,000 that was available last year from unobligated balances for termination of the superconducting super collider and not available this year. Nevertheless, the Committee continues its strong support for basic research and development activities funded in this account.

#### CLIMATE CHANGE TECHNOLOGY INITIATIVE

The Committee has strongly supported the fundamental science pursued by the Department. The value and credibility of the Department's science program is dependent upon responsible leadership that would ensure that research is properly peer-reviewed and wholly independent from the policy positions of any Administration. While it is critical that science inform policy, it is equally critical that policy not direct scientific conclusions.

In the area of climate-related research, the Committee is concerned that this independence is being compromised. The Committee is disturbed that the Department has been publishing "reports" and "papers" and "assessments" that are heavy on conclusions and recommendations and light on new data and sound logic. Examples of these policy-driven testimonials include: *Scenarios of U.S. Carbon Reductions: Potential Impacts of Energy-Efficient and Low-Carbon Technologies by 2010 and Beyond* (September 1997); *Carbon Management: Assessment of Fundamental Research Needs* (August 1997); and *Technology Opportunities to Reduce U.S. Greenhouse Gas Emissions* (October 1997).

The Office of Energy Research has requested \$27,000,000 for the Climate Change Technology Initiative (CCTI). Since much of the work done to date has been half-science and half-policy, the Committee reduction reduces the requested amount by one-half, or \$13,500,000. No funding has been provided for the Office of Energy Research to publish policy-related materials. Full funding has been provided for the underlying science needed to better understand the complexities of the changes in the Earth's climate.

#### HIGH ENERGY PHYSICS

—High energy physics research seeks to understand the nature of matter and energy at the most fundamental level, as well as the basic forces which govern all processes in nature. The recommendation continues the Committee's strong support for these fundamental pursuits.

—The recommendation is \$696,500,000, a \$16,465,000 increase over the amount provided in the current fiscal year and a \$5,500,000 increase over the amount of the budget request. The recommendation includes a \$3,000,000 increase over the budget re-

quest for facility operations, and a \$2,500,000 increase for the research and technology program.

#### LARGE HADRON COLLIDER

—The recommendation includes \$65,000,000, an increase of \$30,000,000 over the amount provided in the current fiscal year, and the same amount as the budget request. The recommendation does not include the advance appropriation for fiscal years 2000 through 2004. The Committee recognizes the importance of this new machine to the physics community. The nation's scientists who have played a vital role in the recent cutting edge discoveries at Fermilab and other U.S. facilities, including the discovery of what may be the top quark, certainly should have an opportunity to participate in the cutting edge science that will be possible upon completion of the world's most powerful accelerator. The Committee will carefully monitor this program to protect the investment made by the American people and with the hope that this unprecedented investment across borders will be a model for future sensible cost-sharing international partnerships.

#### NUCLEAR PHYSICS

The goal of nuclear physics research is to improve understanding of the structure and properties of atomic nuclei and the fundamental forces between the constituents that form the nucleus. Nuclear processes determine essential physical characteristics of our universe and the composition of matter that forms it. The recommendation continues the Committee's support for these fundamental pursuits. The recommendation is \$335,100,000, a \$14,175,000 increase over the amount provided in the current fiscal year and a \$2,500,000 increase over the amount requested.

#### BIOLOGICAL AND ENVIRONMENTAL RESEARCH

The Committee recommendation is \$405,900,000, an \$810,000 reduction from the current fiscal year, and a \$13,300,000 increase over the budget request. The Committee recognizes the ongoing valuable work being done in the fight against Parkinson's disease. The recommendation includes funding to increase the Department's research of cell structures, diagnostic techniques and efforts related to drug development.

Within available funds, \$8,800,000 is provided for continuing the research contribution of the National Institute for Global Environmental Change program. This is the same amount included in the Administration's request.

#### BASIC ENERGY SCIENCES

The Committee recommendation for basic energy sciences is \$779,100,000, an increase of \$110,860,000 over the current fiscal year, and a \$57,000,000 reduction from the budget request.

The Committee remains committed to robust basic energy research programs which are characterized by cutting-edge basic research, availability of world-class facilities to the scientific and research community, and direction to meet current and future energy-related challenges. For purposes of reprogramming during fis-

cal year 1999, funding may be reallocated by the Department among all operating accounts in basic energy sciences. The recommendation includes \$7,000,000, the same amount as the budget request, for the Experimental Program to Stimulate Competitive Research (EPSCoR).

#### SPALLATION NEUTRON SOURCE (SNS)

—The recommendation includes \$100,000,000 for a new neutron source, a \$77,000,000 increase over the current fiscal year. There is widespread agreement that a new neutron source and related instrumentation would provide scientists with the tools needed to advance understanding of materials composition and cell structures. Due to severe budget constraints, the Committee was unable to provide the full amount of the request.

#### OTHER ENERGY RESEARCH PROGRAMS

The Committee recommendation for the Computational and Technology Research program is \$138,640,000, a reduction of \$22,000,000 from the budget request. The recommendation does not include funds for the Next Generation Internet program (NGI). The Committee has had to cut existing programs and make hard choices and was unable to justify starting a new spending program. The justification provided for this program did not explain the need for a multi-million dollar government program at a time when hundreds of private companies are investing billions of dollars on hardware and software innovations. The Committee was informed that funds would be used to upgrade hardware at laboratories and universities and that the Department would study ways to improve the capabilities of the Internet. The Committee notes that these activities have been funded in this account and that it is unnecessary to create a new program to continue these efforts.

#### UNIVERSITY AND SCIENCE EDUCATION

—The Committee has not provided funds for a new university and science education program. The Office of Energy Research informs the Committee that grants to colleges and universities are approximately one-half billion dollars in the current fiscal year. This level of funding is consistent with the Committee's direction that the Department fully support higher education. Two years ago, the Committee eliminated the university and science education program and directed that the Department fully support university programs by providing funds from programs. The Committee urges the Department to continue to place a high priority on graduate and post-graduate students. The Committee continues to believe that the Department should place the highest priority on university programs. The use of program funds benefits the missions of the Department and directly connects our nation's future scientists to cutting edge research.

—The recommendation does include funding for the Laboratory Cooperative, National Science Bowl, and Albert Einstein Distinguished Educator Fellowships programs in the program direction account as described below.

PROGRAM DIRECTION

The recommendation is \$43,100,000, a \$3,240,000 increase over the amount requested. The Committee has provided \$38,600,000 for standard program direction activities, and an additional \$4,500,000 to fund the Laboratory Cooperative, National Science Bowl, and Albert Einstein Distinguished Educator Fellowships programs. The Committee takes this action to establish a legitimate funding mechanism for these activities. The Office of Energy Research is directed to provide full funding for programs as directed by the Congress. In the past, the Department has funded these and other Secretary/Director initiatives despite the lack of appropriations and at the expense of other programs. The Committee directs that the Department refrain from surreptitiously funding programs not included in the budget request and programs for which funding has been specifically denied by Congress.

FUNDING ADJUSTMENTS

—The recommendation includes two funding adjustments. The \$7,600,000 adjustment represents previously appropriated funds the Department has identified as surplus. The funds were provided as part of the closeout costs related to cancellation of the Superconducting Super Collider. The \$13,500,000 adjustment represents an estimate of the policy-related work requested as part of the Climate Change Technology Initiative. This adjustment is to be made exclusively to the Basic Energy Sciences and Biological and Environmental Research programs.

NUCLEAR WASTE DISPOSAL FUND

Appropriation, 1998 .....	\$160,000,000
Budget Estimate, 1999 .....	190,000,000
Recommended, 1999 - .....	160,000,000
Comparison:	
Appropriation, 1998 - .....	
Budget Estimate, 1999 - .....	- 30,000,000

The Nuclear Waste Policy Act of 1982 and the Nuclear Waste Policy Act Amendments of 1987 established a waste management system for the disposal of spent nuclear fuel and high-level radioactive waste from commercial and atomic energy defense activities. These laws also established the Nuclear Waste Disposal Fund to finance disposal activities through the collection of fees from the owners and generators of nuclear waste.

Due to severe budget constraints, the Committee recommends \$160,000,000 to be derived from the Fund in fiscal year 1999. Combined with the appropriation of \$190,000,000 to the Defense Nuclear Waste Disposal account, a total of \$350,000,000 will be available for program activities in fiscal year 1999, the same as fiscal year 1998.

The Department is to review all cost components to see what savings can be achieved in fiscal year 1999. The Committee has not provided funding for the State of Nevada or the affected units of local government. The Committee continues to be concerned about the excessive use of support service contractors at the Yucca Mountain Project Office and Headquarters and directs the Department

## DEPARTMENT OF ENERGY (IN THOUSANDS OF DOLLARS)

	FY 1998 ENACTED	BUDGET ESTIMATE	HOUSE ALLOWANCE
Facilities.....	---	96,180	---
Termination costs.....	77,035	---	81,150
Uranium programs.....	61,600	66,700	53,518
Construction.....			
98-U-200 depleted UF6 cylinder storage yards, Paducah, KY.....	400	---	---
96-U-201 depleted UF6 cylinder storage yards, Paducah, KY.....	2,600	---	---
Subtotal, Construction.....	3,000	---	---
Total, Uranium programs.....	64,600	66,700	53,518
Isotope support.....	16,000	16,450	14,000
Construction.....			
99-E-201 isotope production facility, LANL.....	---	6,000	---
Total, Isotope support.....	16,000	22,450	14,000
Nuclear energy plant optimization.....	---	10,000	---
Program direction.....	21,000	23,550	21,000
TOTAL, NUCLEAR ENERGY.....	243,060	325,750	227,769
ENVIRONMENT, SAFETY AND HEALTH			
Environment, safety and health.....	42,500	37,602	27,602
Program direction.....	23,550	38,398	18,398
TOTAL, ENVIRONMENT, SAFETY AND HEALTH.....	66,050	76,000	46,000
ENERGY RESEARCH			
Fusion energy sciences program.....	232,000	228,160	232,000
ENERGY SUPPORT ACTIVITIES			
Technical information management program.....			
Program direction.....	1,600	2,340	1,600
Construction.....	7,500	7,500	7,500
Construction.....	1,000	---	---
Total, Technical information management program.....	10,100	9,840	9,100
Field offices and management.....	95,000	104,541	85,000
Oak Ridge Landlord.....	---	12,500	11,000
TOTAL, ENERGY SUPPORT ACTIVITIES.....	105,100	126,881	105,100
Subtotal, Energy supply.....	992,476	1,193,947	962,274
Renewable energy research program.....	-44,304	-47,905	-47,905
Use of prior year balances.....	-31,535	-17,000	-31,535
General reduction for contractor training.....	-9,830	---	---
TOTAL, ENERGY SUPPLY.....	906,807	1,129,042	882,834
NON-DEFENSE ENVIRONMENTAL MANAGEMENT			
Site closure.....	269,911	254,344	254,344
Site/project completion.....	113,950	87,248	87,248
Post 2006 completion.....	82,294	83,908	83,908
Science and technology.....	---	26,500	---
Fast flux test facility standby/shutdown.....	30,904	---	31,200
TOTAL, NON-DEFENSE ENVIRONMENTAL MANAGEMENT.....	497,059	452,000	456,700
URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND			
Decontamination and decommissioning.....	180,200	242,000	195,000
Uranium/thorium reimbursement.....	40,000	35,000	30,000
TOTAL, URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING.....	220,200	277,000	225,000
SCIENCE			
High energy physics			
Research and technology.....	210,240	213,365	215,865
Facility operations.....	418,945	456,635	459,635
Construction.....			
98-G-306 Wilson hall safety improvements, Fermilab.....	---	6,700	6,700
98-G-304 Neutrinos at the main injector, Fermilab.....	5,500	14,300	14,300



## DEPARTMENT OF ENERGY (IN THOUSANDS OF DOLLARS)

	FY 1998 ENACTED	BUDGET ESTIMATE	HOUSE ALLOWANCE
98-G-305 C-Zero area experimental hall, Fermilab.....	5,000	---	---
97-G-303 Master substation upgrade, SLAC.....	9,400	---	---
92-G-302 Fermilab main injector, Fermilab.....	30,950	---	---
Subtotal, Construction.....	50,850	21,000	21,000
Subtotal, Facility operations.....	469,795	477,635	480,635
Total, High energy physics.....	680,035	691,000	696,500
Nuclear physics.....	261,525	315,980	318,480
Construction			
91-G-300 Relativistic heavy ion collider, BNL.....	59,400	16,620	16,620
Total, Nuclear physics.....	320,925	332,600	335,100
Biological and environmental research.....	406,710	392,600	405,900
Basic energy sciences			
Materials sciences.....	392,475	417,216	417,216
Chemical sciences.....	199,933	209,582	209,582
Engineering and geosciences.....	41,371	44,413	44,413
Energy biosciences.....	27,461	32,489	32,489
Construction			
99-E-334 Spallation Neutron Source, ORNL.....	---	128,400	71,400
96-E-300 Combustion research facility, Phase II, SNL/L.....	7,000	4,000	4,000
Subtotal, Construction.....	7,000	132,400	75,400
Total, Basic energy sciences.....	668,240	836,100	779,100
Other energy research			
Computational and technology research.....	150,907	160,640	138,640
Energy research analyses.....	1,500	1,000	1,000
Multiprogram energy labs - facility support			
Multiprogram general purpose facilities			
Infrastructure support.....	---	1,160	1,160
Construction			
WEL-001 Multiprogram energy laboratory infrastructure projects, various locations.....	7,269	14,924	14,924
95-E-301 Central heating plant rehabilitation, Phase I (ANL).....	3,442	---	---
94-E-363 Roofing improvements (ORNL).....	4,000	4,908	4,908
Subtotal, Construction.....	14,701	19,832	19,832
Subtotal, Multiprogram gen. purpose facilities	14,701	20,992	20,992
Environment, safety and health			
Construction			
95-E-333 Multiprogram energy laboratories upgrades, various locations.....	5,273	268	268
95-E-307 Fire safety imp. III (ANL).....	718	---	---
95-E-308 Sanitary system mods. II (BNL).....	568	---	---
Subtotal, Environment, safety and health.....	6,559	268	268
Subtotal, Multiprogram energy labs - fac. support	21,260	21,260	21,260
Total, Other energy research.....	173,667	182,900	160,900
University science education programs			
Laboratory cooperative science centers.....	---	15,000	---
Program direction.....	37,600	39,860	43,100
Subtotal, Science.....	2,287,177	2,490,060	2,420,600
Use of prior year SSC balances.....	-35,000	-7,600	-7,600
Use of other prior year balances.....	-13,900	---	---
General reduction for contractor training.....	-2,569	---	---
General reduction for policy papers for CCTI.....	---	---	-13,500
TOTAL, SCIENCE.....	2,235,708	2,482,460	2,399,500