

DOE mission is anticipated; Site/Project Completion where cleanup will be completed by 2006, but DOE programs will continue; and Post 2006 Completion where cleanup activities at the site will extend beyond 2006.

The Committee recommendation is \$327,223,000, a reduction of \$3,711,000 from the budget request. No funds have been provided for the National Low-Level Waste Program in fiscal year 2000. Over \$80,000,000 has been provided for the low-level waste program over the past two decades, and State expertise is now mature enough that Federal funding is no longer required.

#### URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND

Appropriation, 1999 .....	\$ 220,200,000
Budget Estimate, 2000 .....	240,198,000
Recommended, 2000 .....	240,198,000
Comparison:	
Appropriation, 1999 .....	+19,998,000
Budget Estimate, 2000 .....	.....

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 2000 the Department of Energy will transfer \$420,000,000 into this Fund.

The Committee recommends \$240,198,000, the same as the budget request. The Committee continues to encourage the Department to review all costs included in the UED&D program and seek to minimize those of lesser priority. The Committee believes there are many efficiencies to be made in all areas of the environmental management program.

The Committee recommendation includes \$30,000,000, the same as the budget request, 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, 1999 .....	\$ 2,682,860,000
Budget Estimate, 2000 .....	2,839,178,000
Recommended, 2000 .....	2,718,647,000
Comparison:	
Appropriation, 1999 .....	+35,787,000
Budget Estimate, 2000 .....	- 120,531,000

The Science account includes the following programs: high energy and nuclear physics; biological and environmental research; basic energy sciences; computational and technology research; other energy research; fusion energy sciences; Oak Ridge landlord; and program direction (including headquarters and field offices). 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 more than \$200,000,000 from the amount provided in last year's bill and more than \$300,000,000 from the amount in the budget request. As in prior years, the Committee was able to identify lower priority programs for reductions while protecting basic research programs funded in the Science 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 committed to ensuring 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. The Committee strongly supports the data collection and peer-reviewed science sponsored by the Department.

#### 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 \$715,525,000, a \$19,025,000 increase over the amount provided in the current fiscal year and an \$18,435,000 increase over the amount of the budget request. The recommendation includes a \$16,435,000 increase over the budget request for facility operations, and a \$2,000,000 increase for the research and development program. The increase reflects the Committee's continued support for full utilization of user facilities. The recommendation also includes funding for orderly and complete transition of the use of the Alternating Gradient Synchrotron for the nuclear physics program.

#### 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 \$357,940,000, a \$22,840,000 increase over the amount provided in the current fiscal year and a \$5,115,000 increase over the amount requested. The increase reflects the first full year of operations at the Relativistic Heavy Ion Collider (RHIC), the budget amendment to continue operations at the Bates Laboratory and the Committee's continued support for full utilization of the Department's world-class user facilities.

#### BIOLOGICAL AND ENVIRONMENTAL RESEARCH

The Committee recommendation is \$406,170,000, a \$37,430,000 reduction from the current fiscal year. The Committee recommendation is the same amount as the budget request, adjusted to exclude funding set aside for the Garden State Cancer Center.

#### BASIC ENERGY SCIENCES

The Committee recommendation for basic energy sciences is \$735,989,000, a reduction of \$73,111,000 from the current fiscal year, and a \$152,095,000 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 fiscal year 2000, 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).

*High-Flux Beam Reactor.*—The Committee has included statutory language prohibiting the Department from re-starting the High-Flux Beam Reactor. This reactor has been shut down since December, 1996. The Department has failed to meet its own deadlines for making a decision about the future of this reactor. The Committee directs that the Department complete the environmental impact study (EIS) no later than the date provided to the Committee, November 30, 1999, and issue a record of decision no later than thirty days after issuing the final EIS. The Committee has watched deadlines pass while the Department continues funding necessary caretaking and safety improvements with requirements of more than \$20,000,000 per year. The Committee further directs the Department to provide a budget and program plan reflecting the record of decision with the submittal of the fiscal year 2001 budget request.

*Spallation Neutron Source.*—The recommendation provides \$67,900,000, including \$17,900,000, the same amount as the budget request, for underlying research and development needed to confirm design for this unique machine and \$50,000,000 for construction, a reduction of \$146,100,000 from the amount requested. The Committee has again recommended a reduction in the funding level for this project based on several unfavorable reviews of the management of this project including reviews by the Department

of Energy (DOE), the General Accounting Office (GAO), and the comprehensive independent review commissioned by the Committee (EG&G). In testimony to the Committee, the Department stated that: "The only reason for the change in the total project cost is the change in the fiscal year 1999 budget for the project from \$157 million to \$130 million." Each of the reports cited problems including, for example, the need to reorganize the project office, the need for better lines of responsibility through the lab structure, and the need for project managers with project manager experience. Each of these are significant issues that must be addressed before construction commences. None of these are attributable to the Congress's recognition that this project was not ready for full funding last year. It is unfortunate that the Department chose to first blame Congress when cost estimates were increased.

Despite these problems, the Committee is encouraged that the Department is re-evaluating the costs and proposals submitted by the proposed participating laboratories. The Department has already announced that this project is now on track and that its new management team and project management structure have eliminated all of the problems and concerns of the reports cited above. The Committee has grown accustomed to the Department immediately solving all problems with the issuance of a press release; however, the Committee is holding onto its confetti.

The Committee will continue to closely follow the progress of this project and urges the Department to follow through on its stated commitment to put the goals and interests of this taxpayer-funded project above the goals and interests of the individual labs that ultimately participate in this project. Consistent with the authorization bill recently passed by the House Committee on Science, the Department is prohibited from obligating funds provided in this Act until the following are provided to the committees of jurisdiction, namely the Committee on Science of the House, the Committee on Energy and Natural Resources of the Senate, and the Committees on Appropriations of the House and the Senate:

- (1) Certification that senior project management positions for the project have been filled by qualified individuals;

- (2) Cost baseline and project milestones for each major construction and technical system activity, consistent with the overall cost and schedule submitted with the Department's fiscal year 2000 budget, that have been reviewed and certified by an independent entity, outside the Department and having no financial interest in the project, as the most cost-effective way to complete the project;

- (3) Binding legal agreements that specify the duties and obligations of each laboratory of the Department in carrying out the project;

- (4) A revised project management structure that integrates the staff of the collaborating laboratories working on the project under a single project director, who shall have direct supervisory responsibility over the duties and obligations described in subparagraph (3) above,

- (5) Official delegation by the Secretary of primary authority with respect to the project to the project director;

(6) Certification from the Comptroller General that the total taxes and fees in any manner or form paid by the Federal government on the SNS and the property, activities, and income of the Department relating to the SNS to the State of Tennessee or its counties, municipalities, or any other subdivision thereof, does not exceed the aggregate taxes and fees for which the Federal government would be liable if the project were located in any other State that contains a national laboratory of the Department; and

(7) Annual reports on the SNS project, included as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

#### OTHER ENERGY RESEARCH PROGRAMS

The Committee recommendation for the Computational and Technology Research program is \$143,000,000, the same amount as the current fiscal year, and a reduction of \$53,875,000 from the budget request. The recommendation does not include funds for the Scientific Simulation Initiative (SSI) or the Next Generation Internet (NGI) programs. The Committee has had to cut existing programs and make hard choices and was unable to justify starting these new spending programs.

The budget justification for NGI failed to 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.

The budget justification for SSI failed to justify the need to establish a second supercomputing program in the Department of Energy. The Congress has been supportive of the ASCI program which the Department claimed would have benefits in addition to the defense purposes for which it was originally created. The ASCI program, for which Congress is providing more than \$300,000,000 per year, seeks to build and operate massively parallel computers with a performance goal of 100 TeraOps by 2004. The proposed SSI program has a goal of building and operating a separate, yet similar, program dedicated exclusively to domestic purposes. At this time, the Committee cannot support this massively parallel proposal to manage and fund two separate supercomputing programs.

The Committee recognizes that the Department has re-classified some of its ongoing activities and therefore has not reduced the budget request by the \$85,000,000 requested for these two "new" programs. The Committee appreciates the advantages of modeling and having computing capability to analyze complex problems. The Committee would like to work with the Department to get better answers to questions it has about this new proposal. (For example, the Department declined to answer direct questions about the out-year costs for this program.) The Committee looks forward to fur-

ther discussions to identify a program that has mutually supportable budget and program plans.

*Energy research analysis.*—The Committee recommendation includes \$1,000,000, the same amount as the current fiscal year and the budget request.

*Multi-program energy labs.*—The Committee recommendation includes \$21,260,000, an increase of \$1,000,000 over the budget request. The Committee regrets that the Department has failed to meet its obligations for payments of lieu of taxes and has provided sufficient funding to pay arrearages and obligations through fiscal year 1998. The Department is directed to make these payments, some of which are delinquent from fiscal year 1994, as expeditiously as possible.

*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 amount to 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. Three 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 includes \$4,500,000, the same amount as the budget request, for the Laboratory Cooperative, National Science Bowl and Albert Einstein Distinguished Educator Fellowships programs in the program direction account.

#### FUSION ENERGY SCIENCES

The Committee recommendation is \$250,000,000, a \$27,386,000 increase over the budget amount. The Committee commends the Department for its efforts to pursue the most promising paths towards producing electricity from fusion. The Committee has provided sufficient funding to accelerate and fully utilize the user facilities currently in operation. The Committee will work closely with the Department to review the work done by the Secretary of Energy's Advisory Board and continue to support the goals of the fusion energy sciences program.

The Committee remains committed to a fusion program that is based on both quality science and the ultimate goal of practical fusion energy. A positive development in this regard is the "roadmapping" process, which the fusion community is now undertaking and which includes both the MFE and IFE approaches. Positive aspects of this process include the emphasis on increasing diversity in the program and strengthening of peer review. The Committee is pleased with the advanced-tokamak emphasis of current tokamak research, which is in keeping with the program emphasis on innovation.

Additional funds are provided to support new work in concept innovation in both MFE and IFE, to provide for more effective utilization of the existing national research facilities, and to support the underlying technology development which sustains this research. The Department is directed to provide an updated spending plan to the Committees on Appropriations within thirty days of enactment of the accompanying bill. The Committee looks forward to working with the Department on budget and program plans to accelerate the accomplishments in the fusion program.

The recommendation includes \$13,600,000, the same amount as the budget request, to continue landlord activities and begin decontamination and decommissioning of the Tokamak Fusion Test Reactor (TFTR). The Committee expects that decontamination and decommissioning of the TFTR facility will go forward as proposed and will be managed by the Princeton Plasma Physics Laboratory. In developing future budgets and program plans, the Committee strongly encourages the Department of Energy and the Administration to ensure that this work can proceed without negatively affecting the ongoing research program.

#### OAK RIDGE LANDLORD

The Committee recommendation provides \$11,800,000, a reduction of \$12,000 from the budget request. This program was transferred from the Energy Supply account.

#### PROGRAM DIRECTION

The recommendation is \$126,963,000. This includes \$52,360,000, the same amount as the budget request, for headquarters activities, and \$74,603,000 for the field offices for which funding was transferred to this account. The Committee has provided \$47,860,000 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 Science 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.

*Field offices.*—The Department has reorganized the reporting structure for the field offices formerly included in the Energy Supply account. These offices now report directly to an Assistant Secretary. Accordingly, the Committee recommendation moves the funding for the Chicago, Oakland, and Oak Ridge Operations Offices to the Science account. The Committee recommendation includes \$74,603,000, a reduction of \$8,289,000 from the budget request. The Committee urges the Department to take a leadership role in establishing a more streamlined and efficient management structure.

## FUNDING ADJUSTMENTS

The recommendation for Science includes several funding adjustments. Recent reviews by the General Accounting Office (GAO) and the Department's Inspector General (IG) indicate that the Department has been very lax in reviewing expenses incurred by the management and operating contractors. The Committee expects the Department to review all costs incurred by the contractors, make judgments on the validity of those costs, and reduce those which cannot be justified to the satisfaction of the taxpayer. The Department's program managers should be monitoring all of these costs. Reports by the GAO and IG indicating wasteful and excessive spending cast doubt on the validity of all the program costs. To the extent practicable, the Committee directs that these reductions not be applied to the operation of user facilities.

*Contractor travel.*—According to the General Accounting Office (GAO), in fiscal year 1998, programs funded in the Science account were charged approximately \$16,000,000 for contractor travel expenses. The Committee recommends a reduction of \$8,000,000 to be allocated to contractor travel expenses in fiscal year 2000.

The following reductions make up the \$43,000,000 general reduction recommended by the Committee.

*Management and operating contractor employees in Washington.*—Science programs are charged approximately \$6,000,000 on contractor employees and contractor offices in the Washington metropolitan area. The Committee seriously questions the need for this contractor presence in Washington and has reduced this funding by \$3,000,000.

*Science education funding.*—Rather than requesting funding for this program in a visible line item as it has in prior years, the Department chose to bury \$10,000,000 in five of the nineteen program lines. The Committee recommendation has included \$4,500,000 for Laboratory Cooperative, National Science Bowl, and Albert Einstein Distinguished Educator Fellowships programs in the program direction lines, but has not included funds for these new programs as proposed in the budget request.

*Laboratory Directed Research and Development (LDRD) Funding.*—The Department currently allows each laboratory director to use six percent of all operating funds provided to the laboratory to conduct employee-suggested research and development projects selected at the discretion of the laboratory directors. For fiscal year 2000, the Committee estimates that approximately \$30,000,000 of that will come from the Science account, and thus, has eliminated this funding.

## NUCLEAR WASTE DISPOSAL

Appropriation, 1999 .....	\$169,000,000
Budget Estimate, 2000 .....	258,000,000
Recommended, 2000 .....	169,000,000
Comparison:	
Appropriation, 1999 .....	
Budget Estimate, 2000 .....	- 89,000,000

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 radio-



## DEPARTMENT OF ENERGY (IN THOUSANDS OF DOLLARS)

	FY 1999 ENACTED	BUDGET ESTIMATE	HOUSE ALLOWANCE
Isotope support.....	15,500	13,000	10,000
Construction			
99-E-201 Isotope production facility (LANL).....	6,000	8,000	8,000
Total, Isotope support.....	21,500	21,000	18,000
Program direction.....	24,700	24,960	24,700
TOTAL, NUCLEAR ENERGY.....	283,966	269,305	265,700
ENVIRONMENT, SAFETY AND HEALTH			
Environment, safety and health.....	32,000	31,752	17,752
Program direction.....	18,398	18,998	18,998
TOTAL, ENVIRONMENT, SAFETY AND HEALTH.....	50,398	50,750	36,750
ENERGY SUPPORT ACTIVITIES			
Technical information management program.....	1,600	1,600	1,600
Program direction.....	7,000	7,500	7,000
Total, Technical information management program....	8,600	9,100	8,600
Transfer to OSHA.....	1,000	---	1,000
Field operations.....	104,127	102,000	---
Oak Ridge Landlord.....	11,000	11,812	---
TOTAL, ENERGY SUPPORT ACTIVITIES.....	124,727	122,912	9,600
Subtotal, Energy supply.....	824,996	888,988	638,500
Renewable energy research program.....	-47,905	-47,100	-47,100
Use of prior year balances.....	-50,000	---	---
General reduction.....	---	---	-5,000
Transfer from Geothermal and USEC.....	---	-5,821	-5,821
Contractor travel savings.....	---	-1,276	-3,000
TOTAL, ENERGY SUPPLY.....	727,091	834,791	577,579
NON-DEFENSE ENVIRONMENTAL MANAGEMENT			
Site closure.....	254,344	211,146	211,146
Site/project completion.....	102,948	98,366	94,655
Construction			
93-E-900 Long-term storage of TMI-2 fuel, INEL.....	---	2,500	2,500
Subtotal, Site/project completion.....	102,948	100,866	97,156
Post 2006 completion.....	83,908	18,922	18,922
Use of prior year balances.....	-10,000	---	---
TOTAL, NON-DEFENSE ENVIRONMENTAL MANAGEMENT.....	431,200	330,934	327,223
URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND			
Decontamination and decommissioning.....	190,200	210,198	210,198
Uranium/thorium reimbursement.....	30,000	30,000	30,000
TOTAL, URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING.....	220,200	240,198	240,198
SCIENCE			
High energy physics			
Research and technology.....	215,865	227,190	229,190
Facility operations.....	459,635	441,200	457,635
Construction			
00-G-307 SLAC office building.....	---	2,000	2,000
99-G-306 Wilson hall safety improvements, Fermilab.....	6,700	4,700	4,700
98-G-304 Neutrinos at the main injector, Fermilab.....	14,300	22,000	22,000
Subtotal, Construction.....	21,000	28,700	28,700
Subtotal, Facility operations.....	480,635	469,900	486,335
Total, High energy physics.....	696,500	697,090	715,525

## DEPARTMENT OF ENERGY (IN THOUSANDS OF DOLLARS)

	FY 1999 ENACTED	BUDGET ESTIMATE	HOUSE ALLOWANCE
Nuclear physics.....	318,480	352,825	357,940
Construction			
91-G-300 Relativistic heavy ion collider (BNL).....	16,620	---	---
Total, Nuclear physics.....	335,100	352,825	357,940
Biological and environmental research.....	443,600	411,170	406,170
Basic energy sciences			
Materials sciences.....	417,216	407,636	407,636
Chemical sciences.....	209,582	215,577	209,582
Engineering and geosciences.....	44,413	37,545	37,545
Energy biosciences.....	32,489	31,226	31,226
Construction			
99-E-334 Spallation neutron source (ORNL).....	101,400	196,100	50,000
96-E-300 Combustion research facility, Phase II, SNL/L.....	4,000	---	---
Subtotal, Construction.....	105,400	196,100	50,000
Total, Basic energy sciences.....	809,100	888,084	735,989
Other energy research			
Computational and technology research.....	143,000	196,875	143,000
Energy research analyses.....	1,000	1,000	1,000
Multiprogram energy labs - facility support			
Infrastructure support.....	1,160	1,160	2,160
Construction			
MCL-001 Multiprogram energy laboratory infrastructure projects, various locations.....	14,924	18,351	18,351
Multiprogram general purpose facilities			
Construction			
94-E-363 Roofing improvements (ORNL).....	4,908	749	749
Environment, safety and health			
Construction			
96-E-333 Multiprogram energy laboratories upgrades, various locations.....	268	---	---
Subtotal, Multiprogram energy labs - fac. suppor	21,260	20,260	21,260
Total, Other energy research.....	165,260	218,135	165,260
Fusion energy sciences program.....	223,300	222,614	250,000
Oak Ridge landlord.....	---	---	11,800
Program direction			
Headquarters.....	49,800	52,360	52,360
Field offices.....	---	---	74,603
Total, Program direction.....	49,800	52,360	126,963
Subtotal, Science.....	2,722,660	2,842,278	2,769,647
Use of prior year SSC balances.....	-7,600	---	---
Use of other priority year balances.....	-13,000	---	---
Contractor travel savings.....	---	-3,100	-8,000
General reduction.....	-5,700	---	-43,000
General reduction for policy papers for CCTI.....	-13,500	---	---
TOTAL, SCIENCE.....	2,682,860	2,839,178	2,718,647
DEPARTMENTAL ADMINISTRATION			
Administrative operations			
Salaries and expenses			
Office of the Secretary.....	4,175	4,940	4,940
Board of contract appeals.....	715	838	838
Chief financial officer.....	22,350	23,792	23,792
Contract reform.....	3,200	3,200	3,000
Congressional and intergovernmental affairs.....	4,900	4,910	4,910
Economic impact and diversity.....	4,700	5,046	4,700
Field management.....	7,500	8,080	1,000
Management and administration.....	19,250	21,434	21,000
Management and administration.....	97,000	101,273	97,000
Policy office.....	14,000	17,430	12,000
Public affairs.....	3,500	3,963	3,700
Subtotal, Salaries and expenses.....	181,290	194,906	176,880
Program support			
Minority economic impact.....	1,700	1,700	1,700
Policy analysis and system studies.....	350	1,000	350
Environmental policy studies.....	2,000	2,432	500