

mental Policy Act. According to the Nuclear Waste Policy Act, the final environmental impact statement and any associated comments must be included with the Secretary's determination of site recommendation. The Committee is concerned that the Department has not dedicated sufficient resources to address this issue. Furthermore, the Committee is concerned that a failure to incorporate this information into a possible decision about site suitability will lead to additional delays and cost overruns in the Yucca Mountain site characterization program. The Committee recommends the Department allocate appropriate funds to complete the environment impact statement on transportation of nuclear waste.

Finally, the Committee is concerned that the costs of the repository, which have clearly escalated, are still not well understood by the Department. To say the least, it is disturbing that overall costs have nearly doubled (from \$30,000,000,000 to \$58,000,000,000) since the early 1990's. More troubling is the \$12,000,000,000 increase in costs during just the last 3 years. It is difficult, for example, to understand the implications to design, licensing, construction, and operational costs of such dramatic differences in concepts as represented by the change from a sealed repository to a monitored, retrievable storage facility. The Department is encouraged to maintain current construction and operational cost assessments for the proposed repository that provide comparable costs of the design and operational concepts that remain viable options as the site characterization and performance assessments proceed.

The Committee has provided \$2,500,000 for the State of Nevada and \$6,000,000 for affected units of local government in accordance with the statutory restrictions contained in the Nuclear Waste Policy Act.

#### SCIENCE

Appropriations, 2001 .....	\$3,180,341,000
Budget estimate, 2002 .....	3,159,890,000
Committee recommendation .....	3,268,116,000

The Committee recognizes that the relatively small funding increases provided to the Office of Science are inadequate. While most programs are funded above the Administration's request, the severe non-defense spending constraints that the Committee operates under have made it impossible to do justice to many of these outstanding programs and initiatives. Unlike the Administration's request, the Committee recommendation is sufficient to avoid any staff reductions at labs or universities.

#### HIGH ENERGY PHYSICS

Appropriations, 2001 .....	\$726,130,000
Budget estimate, 2002 .....	716,100,000
Committee recommendation .....	725,100,000

The Committee recommendation includes \$725,100,000 for high energy physics, an increase of \$9,000,000 over the request. Within the amounts provided, the Committee recommends \$2,000,000 for materials development of low temperature superconductors to support future high energy physics requirements; and an additional \$7,000,000 for university support. Within available funds, the Com-

mittee recommends \$1,000,000 for research, development, and initial demonstration in support of an experiment, to be conducted underground at the Waste Isolation Pilot Plant, to evaluate the mass of the neutrino through study of double beta decay of xenon-136. These funds may be used for extraction of the xenon-136 in a Russian nuclear city in coordination with the NNSA/Non-Proliferation programs.

#### NUCLEAR PHYSICS

Appropriations, 2001 .....	\$369,890,000
Budget estimate, 2002 .....	360,510,000
Committee recommendation .....	373,000,000

The Committee recommends \$373,000,000 for nuclear physics, an increase of \$12,490,000 above the request and an increase of \$3,110,000 above current year levels. The Committee recommends that the additional funds be used to enhance operation of the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory and the Continuous Electron Beam Accelerator Facility at the Thomas Jefferson National Accelerator Facility in Virginia.

#### BIOLOGICAL AND ENVIRONMENTAL RESEARCH

Appropriations, 2001 .....	\$501,260,000
Budget estimate, 2002 .....	442,970,000
Committee recommendation .....	490,000,000

The Committee recommendation includes \$490,000,000 for biological and environmental research, including \$10,000,000 for construction of the laboratory for Comparative and Functional Genomics at Oak Ridge National Laboratory. The recommendation includes an additional \$16,000,000 above the requested level for the Genomes to Life program and \$10,000,000 in additional funding above the requested level for the low dose effects program. Within the recommended amount, the Committee also recommends \$7,000,000 in additional funding for computer upgrades and capital equipment costs at the Environmental Molecular Sciences Laboratory (EMSL); \$11,500,000 to complete the positron emission tomography facility at West Virginia University; and funding to continue the following on-going projects: the Natural Energy Laboratory in Hawaii, and the biological effects of exposure to low-level radioactivity. The recommendation also continues the free air carbon dioxide experiments at the current year level.

#### BASIC ENERGY SCIENCES

Appropriations, 2001 .....	\$1,013,370,000
Budget estimate, 2002 .....	1,004,705,000
Committee recommendation .....	1,040,705,000

The Committee recommendation includes \$1,040,705,000, an increase of \$36,000,000 above the request and an increase of \$27,335,000 over current year levels. For purposes of reprogramming in fiscal year 2002, the Department may allocate funding among all operating accounts within basic energy sciences upon written notice to the appropriate Congressional Committees.

The Committee recommendation includes \$12,000,000 for the Department's Experimental Program to Stimulate Competitive Re-

search and \$4,000,000 for programmatic activities at the National Center of Excellence in Photonics and Microsystems. The Committee's recommendation also includes \$8,300,000 for the SPEAR 3 upgrade at the Stanford Synchrotron Radiation Laboratory.

Additionally, the Committee recommends that the additional funds be used to support the following important activities: facility operations user support; completion of the Nanoscience Research Center project engineering and design; and additional work in computational sciences in materials and chemistry.

*Nanoscale Science Research Centers.*—The Committee recommendation includes \$4,000,000 for project engineering design work for three of five planned user centers for nanoscale science, engineering, and technology research. The Committee strongly supports this new initiative.

*Construction.*—The Committee recommendation includes \$291,000,000 to continue the Spallation Neutron Source, including \$276,300,000 for construction (under Project 99–E–334) and \$15,100,000 for other activities related to the project. The amount represents a \$23,000,000 increase over current year funding. The Committee recommends \$4,000,000 in project engineering and design funding at various locations (under Project 02–SC–002). The Committee also authorizes construction of the Nanoscience Research Center upon completion of the project engineering and design.

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).

#### SAFEGUARDS AND SECURITY

The Committee recommendation provides \$49,818,000 for safeguards and security. This is the amount of the current year level and \$5,594,000 less than the Administration's request. The Committee remains unconvinced that such a large 1-year increase is warranted.

#### SCIENCE PROGRAM DIRECTION

The Committee recommendation provides \$142,385,000 for science program direction, the amount of the request and \$3,140,000 above the current year.

#### OTHER ENERGY RESEARCH PROGRAMS

Appropriations, 2001 .....	\$171,000,000
Budget estimate, 2002 .....	164,050,000
Committee recommendation .....	163,050,000

The Committee recommendation provides \$163,050,000 for other energy research programs, an increase of \$18,050,000 over the current year appropriation.

*Advanced Scientific Computing Research.*—The Committee recommendation provides \$163,050,000 for advanced scientific computing research. This amount is the amount of the request. The Committee directs that \$15,000,000 of available funds be used to support the Scientific Discovery Through Advanced Computing (SciDAC) program and that \$10,000,000 of available funds be used for terascale operating systems development.

#### MULTI-PROGRAM ENERGY LABORATORIES FACILITIES SUPPORT

The Committee recommends \$30,175,000, the amount of the request, for multi-program energy laboratories facilities support. The amount recommended is \$3,755,000 less than the current year. The program supports infrastructure activities at the five national labs under the direction of the Office of Science.

The recommendation includes construction funding for two projects, 02-SC-001 and MEL-001, at the level of the request.

#### FUSION ENERGY SCIENCES

Appropriations, 2001 .....	\$255,000,000
Budget estimate, 2002 .....	248,495,000
Committee recommendation .....	248,495,000

The Committee recommendation for fusion energy sciences is \$248,495,000, the amount of the request.

#### DEPARTMENTAL ADMINISTRATION

(GROSS)

Appropriations, 2001 .....	\$225,942,000
Budget estimate, 2002 .....	221,618,000
Committee recommendation .....	208,948,000

#### (MISCELLANEOUS REVENUES)

Appropriations, 2001 .....	-\$151,000,000
Budget estimate, 2002 .....	-137,810,000
Committee recommendation .....	-137,810,000

The Department recommends \$208,948,000 for departmental administration, a decrease of \$12,670,000 from the Administration's request.

#### INSPECTOR GENERAL

Appropriations, 2001 .....	\$31,430,000
Budget estimate, 2002 .....	31,430,000
Committee recommendation .....	30,000,000

The Committee has provided \$30,000,000 for the Office of the Inspector General.

#### RECOMMENDATION SUMMARY

Details of the Committee's recommendations are included in the table at the end of this title.

#### ATOMIC ENERGY DEFENSE ACTIVITIES

Atomic energy defense activities of the Department of Energy are provided for in two categories—the National Nuclear Security Ad-

DEPARTMENT OF ENERGY—Continued  
[In thousands of dollars]

Project title	Current year enacted	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				Current year enacted	Budget estimate
Total, Other uranium activities .....	62,400	110,784	120,784	+ 58,384	+ 10,000
Reduction for safeguards and security .....	– 14,071	.....	.....	+ 14,071	.....
Across-the-board cut (.22 percent) (Public Law 106–554) .....	– 865	.....	.....	+ 865	.....
<b>TOTAL, URANIUM FACILITIES MAINTENANCE AND REMEDIATION .....</b>	<b>392,502</b>	<b>363,425</b>	<b>408,725</b>	<b>+ 16,223</b>	<b>+ 45,300</b>
<b>SCIENCE</b>					
High energy physics:					
Research and technology .....	234,720	247,870	256,870	+ 22,150	+ 9,000
Facility operations .....	459,010	456,830	456,830	– 2,180	.....
Construction:					
00–G–307 SLAC office building .....	5,200	.....	.....	– 5,200	.....
99–G–306 Wilson hall safety improvements, Fermilab .....	4,200	.....	.....	– 4,200	.....
98–G–304 Neutrinos at the main injector, Fermilab .....	23,000	11,400	11,400	– 11,600	.....
Subtotal, Construction .....	32,400	11,400	11,400	– 21,000	.....
Subtotal, Facility operations .....	491,410	468,230	468,230	– 23,180	.....
Total, High energy physics .....	726,130	716,100	725,100	– 1,030	+ 9,000
Nuclear physics .....	369,890	360,510	373,000	+ 3,110	+ 12,490
Biological and environmental research .....	498,760	432,970	480,000	– 18,760	+ 47,030
Construction: 01–E–300 Laboratory for Comparative and Functional Genomics, ORNL .....	2,500	10,000	10,000	+ 7,500	.....
Total, Biological and environmental research .....	501,260	442,970	490,000	– 11,260	+ 47,030

Basic energy sciences program:					
Materials sciences .....	456,111	434,353	454,353	- 1,758	+ 20,000
Chemical sciences .....	223,229	218,714	228,714	+ 5,485	+ 10,000
Engineering and geosciences .....	40,816	38,938	42,938	+ 2,122	+ 4,000
Energy biosciences .....	33,714	32,400	34,400	+ 686	+ 2,000
Construction:					
02-SC-002 Project engineering and design (VL) .....		4,000	4,000	+ 4,000	.....
99-E-334 Spallation neutron source (ORNL) .....	259,500	276,300	276,300	+ 16,800	.....
Subtotal, Construction .....	259,500	280,300	280,300	+ 20,800	.....
Total, Basic energy sciences .....	1,013,370	1,004,705	1,040,705	+ 27,335	+ 36,000
Advanced scientific computing research .....	170,000	163,050	163,050	- 6,950	.....
Energy research analyses .....	1,000	1,000	1,000	.....	.....
Multiprogram energy labs—facility support:					
Infrastructure support .....	1,160	1,020	1,020	- 140	.....
Oak Ridge landlord .....	10,711	7,359	7,359	- 3,352	.....
Construction:					
MEL-001 Multiprogram energy laboratory infrastructure projects, various locations .....	22,059	18,613	18,613	- 3,446	.....
02-SC-001 Multiprogram energy laboratories, project engineering design, various locations .....		3,183	3,183	+ 3,183	.....
Subtotal, Construction .....	22,059	21,796	21,796	- 263	.....
Total, Multiprogram energy labs—fac. support .....	33,930	30,175	30,175	- 3,755	.....
Fusion energy sciences program .....	255,000	248,495	248,495	- 6,505	.....
Facilities and infrastructure .....			10,000	+ 10,000	+ 10,000
Safeguards and security .....	49,818	55,412	49,818	.....	- 5,594
Program direction:					
Field offices .....	83,307	64,400	63,000	- 20,307	- 1,400
Headquarters .....	51,438	73,525	74,385	+ 22,947	+ 860
Science education .....	4,500	4,460	5,000	+ 500	+ 540
Total, Program direction .....	139,245	142,385	142,385	+ 3,140	.....
Subtotal, Science .....	3,259,643	3,164,802	3,273,728	+ 14,085	+ 108,926

DEPARTMENT OF ENERGY—Continued  
[In thousands of dollars]

Project title	Current year enacted	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				Current year enacted	Budget estimate
Across-the-board cut (.22 percent) (Public Law 106–554) .....	– 7,011	.....	.....	+ 7,011	.....
General reduction .....	– 34,047	.....	.....	+ 34,047	.....
Reduction for safeguards and security .....	– 38,244	.....	.....	+ 38,244	.....
Less security charge for reimbursable work .....	.....	– 4,912	– 4,912	– 4,912	.....
<b>TOTAL, SCIENCE .....</b>	<b>3,180,341</b>	<b>3,159,890</b>	<b>3,268,816</b>	<b>+ 88,475</b>	<b>+ 108,926</b>
<b>NUCLEAR WASTE DISPOSAL</b>					
Repository program .....	135,200	70,577	15,000	– 120,200	– 55,577
Program direction .....	62,800	64,402	10,000	– 52,800	– 54,402
Across-the-board cut (.22 percent) (Public Law 106–554) .....	– 420	.....	.....	+ 420	.....
Reduction for safeguards and security .....	– 6,926	.....	.....	+ 6,926	.....
<b>TOTAL, NUCLEAR WASTE DISPOSAL .....</b>	<b>190,654</b>	<b>134,979</b>	<b>25,000</b>	<b>– 165,654</b>	<b>– 109,979</b>
<b>DEPARTMENTAL ADMINISTRATION</b>					
Administrative operations:					
Salaries and expenses:					
Office of the Secretary .....	5,000	4,700	4,700	– 300	.....
Board of Contract Appeals .....	878	911	911	+ 33	.....
Chief financial officer .....	32,148	36,464	34,000	+ 1,852	– 2,464
Contract reform and privatization .....	2,500	.....	.....	– 2,500	.....
Engineering and project management .....	.....	.....	.....	.....	.....
Congressional and intergovernmental affairs .....	5,000	5,478	4,500	– 500	– 978
Economic impact and diversity .....	5,126	5,230	5,000	– 126	– 230
General counsel .....	22,724	23,058	22,000	– 724	– 1,058
International affairs .....	8,500	8,481	8,500	.....	+ 19
Management and administration .....	77,800	76,392	69,000	– 8,800	– 7,392
Policy office .....	6,600	6,649	6,600	.....	– 49