

106TH CONGRESS
1ST SESSION

H. R. 1655

AN ACT

To authorize appropriations for fiscal years 2000 and 2001 for the civilian energy and scientific research, development, and demonstration and related commercial application of energy technology programs, projects, and activities of the Department of Energy, and for other purposes.

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To authorize appropriations for fiscal years 2000 and 2001 for the civilian energy and scientific research, development, and demonstration and related commercial application of energy technology programs, projects, and activities of the Department of Energy, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Department of Energy
5 Research, Development, and Demonstration Authorization
6 Act of 1999”.

7 **SEC. 2. DEFINITIONS.**

8 For the purposes of this Act, the term—

9 (1) “Department” means the Department of
10 Energy; and

11 (2) “Secretary” means the Secretary of Energy.

12 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

13 (a) ENERGY SUPPLY.—There are authorized to be
14 appropriated to the Secretary for Energy Supply civilian
15 energy and scientific research, development, and dem-
16 onstration and related commercial application of energy
17 technology operation and maintenance and construction
18 programs, projects, and activities for which specific sums
19 are not authorized under other authority of law
20 \$482,266,000 for fiscal year 2000 and \$504,595,630 for
21 fiscal year 2001, to remain available through the end of
22 fiscal year 2002, of which—

23 (1) \$366,524,000 for fiscal year 2000 and
24 \$377,339,630 for fiscal year 2001 shall be for Solar
25 and Renewable Resources Technologies, including—

1 (A) \$5,500,000 for fiscal year 2000 and
2 \$5,665,000 for fiscal year 2001 for Solar Build-
3 ing Technology Research;

4 (B) \$93,309,000 for fiscal year 2000 and
5 \$96,108,270 for fiscal year 2001 for Photo-
6 voltaic Energy Systems;

7 (C) \$18,850,000 for fiscal year 2000 and
8 \$19,415,500 for fiscal year 2001 for Concen-
9 trating Solar Power, of which \$2,000,000 for
10 fiscal year 2000 and \$3,000,000 for fiscal year
11 2001 shall be for experimental beamed power
12 technology demonstrations;

13 (D) \$92,391,000 for fiscal year 2000 and
14 \$95,162,730 for fiscal year 2001 for Biopower/
15 Biofuels Energy Systems;

16 (E) \$45,600,000 for fiscal year 2000 and
17 \$46,968,000 for fiscal year 2001 for Wind En-
18 ergy Systems;

19 (F) \$4,000,000 for fiscal year 2000 and
20 \$4,120,000 for fiscal year 2001 for the Renew-
21 able Energy Production Incentive Program;

22 (G) \$6,000,000 for fiscal year 2000 and
23 \$6,000,000 for fiscal year 2001 for the Inter-
24 national Solar Energy Program;

1 (H) \$3,900,000 for fiscal year 2000 and
2 \$4,017,000 for fiscal year 2001 for the Na-
3 tional Renewable Energy Laboratory;

4 (I) \$33,500,000 for fiscal year 2000 and
5 \$35,000,000 for fiscal year 2001 for Geo-
6 thermal, of which \$4,000,000 for fiscal year
7 2000 and \$4,615,000 for fiscal year 2001 shall
8 be derived from amounts otherwise authorized
9 under this subsection, from savings resulting
10 from reductions in contractor travel pursuant to
11 section 10(d);

12 (J) \$7,000,000 for fiscal year 2000 and
13 \$7,210,000 for fiscal year 2001 for Hydro-
14 power;

15 (K) \$41,303,000 for fiscal year 2000 and
16 \$42,542,000 for fiscal year 2001 for Electric
17 Energy Systems and Storage; and

18 (L) \$19,171,000 for fiscal year 2000 and
19 \$19,746,130 for fiscal year 2001 for Program
20 Direction; and

21 (2) \$115,742,000 for fiscal year 2000 and
22 \$127,256,000 for fiscal year 2001 shall be for Nu-
23 clear Energy, including—

1 (A) \$37,000,000 for fiscal year 2000 and
2 \$37,000,000 for fiscal year 2001 for Advanced
3 Radioisotope Power Systems;

4 (B) \$6,070,000 for fiscal year 2000 and
5 \$6,070,000 for fiscal year 2001 for Test Reac-
6 tor Area Landlord operation and maintenance;

7 (C) \$1,430,000 for fiscal year 2000 and
8 \$1,944,000 for fiscal year 2001 for construction
9 of Project 99-E-200, Test Reactor Area Elec-
10 tric Utility Upgrade, Idaho National Engineer-
11 ing and Environmental Laboratory;

12 (D) \$1,500,000 for fiscal year 2000 and
13 \$2,500,000 for fiscal year 2001 for construction
14 of Project 95-E-201, Test Reactor Area Fire
15 and Life Safety Improvements, Idaho National
16 Engineering and Environmental Laboratory;

17 (E) \$13,500,000 for fiscal year 2000 and
18 \$16,000,000 for fiscal year 2001 for University
19 Reactor Fuel Assistance and Support;

20 (F) \$5,000,000 for fiscal year 2000 and
21 \$7,500,000 for fiscal year 2001 for Nuclear
22 Energy Plant Optimization;

23 (G) \$30,000,000 for fiscal year 2000 and
24 \$35,000,000 for fiscal year 2001 for the Nu-
25 clear Energy Research Initiative; and

1 (H) \$21,242,000 for fiscal year 2000 and
2 \$21,242,000 for fiscal year 2001 for Program
3 Direction.

4 (b) SCIENCE.—There are authorized to be appro-
5 priated to the Secretary for Science scientific and civilian
6 energy research, development, and demonstration oper-
7 ation and maintenance and construction programs,
8 projects, and activities for which specific sums are not au-
9 thorized under other authority of law \$2,657,761,000 for
10 fiscal year 2000 and \$2,691,465,000 for fiscal year 2001,
11 to remain available until expended, of which—

12 (1) \$715,090,000 for fiscal year 2000 and
13 \$753,110,000 for fiscal year 2001 shall be for High
14 Energy Physics, including—

15 (A) \$235,190,000 for fiscal year 2000 and
16 \$246,950,000 for fiscal year 2001 for High En-
17 ergy Physics Research and Technology;

18 (B) \$451,200,000 for fiscal year 2000 and
19 \$473,760,000 for fiscal year 2001 for High En-
20 ergy Physics Facility Operations;

21 (C) \$2,000,000 for fiscal year 2000 and
22 \$5,200,000 for fiscal year 2001 for construction
23 of Project 00–G–307, Research Office Building,
24 Stanford Linear Accelerator Center;

1 (D) \$4,700,000 for fiscal year 2000 and
2 \$4,200,000 for fiscal year 2001 for construction
3 of Project 99–G–306, Wilson Hall Safety Im-
4 provements Project, Fermi National Accelerator
5 Laboratory; and

6 (E) \$22,000,000 for fiscal year 2000 and
7 \$23,000,000 for fiscal year 2001 for construc-
8 tion of Project 98–G–304, Neutrinos at the
9 Main Injector, Fermi National Accelerator Lab-
10 oratory;

11 (2) \$357,714,000 for fiscal year 2000 and
12 \$375,600,000 for fiscal year 2001 shall be for Nu-
13 clear Physics;

14 (3) \$413,674,000 for fiscal year 2000 and
15 \$434,357,000 for fiscal year 2001 shall be for Bio-
16 logical and Environmental Research;

17 (4) \$698,800,000 for fiscal year 2000 and
18 \$733,740,000 for fiscal year 2001 shall be for Basic
19 Energy Sciences, including—

20 (A) \$405,390,000 for fiscal year 2000 and
21 \$425,660,000 for fiscal year 2001 for Materials
22 Sciences Research and Facilities Operations;

23 (B) \$217,179,000 for fiscal year 2000 and
24 \$228,038,000 for fiscal year 2001 for Chemical
25 Sciences Research and Facilities Operations;

1 (C) \$18,820,000 for fiscal year 2000 and
2 \$19,761,000 for fiscal year 2001 for Engineer-
3 ing Research;

4 (D) \$26,056,000 for fiscal year 2000 and
5 \$27,359,000 for fiscal year 2001 for Geo-
6 sciences Research; and

7 (E) \$31,355,000 for fiscal year 2000 and
8 \$32,923,000 for fiscal year 2001 for Energy
9 Biosciences;

10 (5) \$31,474,000 for fiscal year 2000 and
11 \$32,333,000 for fiscal year 2001 shall be for Com-
12 putational and Technology Research, including—

13 (A) \$17,174,000 for fiscal year 2000 and
14 \$18,033,000 for fiscal year 2001 for Mathe-
15 matical, Information, and Computational
16 Sciences; and

17 (B) \$14,300,000 for fiscal year 2000 and
18 \$14,300,000 for fiscal year 2001 for Labora-
19 tory Technology Research;

20 (6) \$1,000,000 for fiscal year 2000 and
21 \$1,000,000 for fiscal year 2001 shall be for Energy
22 Research Analysis;

23 (7) \$22,309,000 for fiscal year 2000 and
24 \$23,425,000 for fiscal year 2001 shall be for Multi-
25 program Energy Laboratories—Facility Support;

1 (8) \$250,000,000 for fiscal year 2000 and
2 \$275,000,000 for fiscal year 2001 shall be for Fu-
3 sion Energy Sciences, including \$13,600,000 for fis-
4 cal year 2000 and \$19,400,000 for fiscal year 2001
5 for Tokamak Fusion Test Reactor Decontamination
6 and Decommissioning;

7 (9) \$49,800,000 for fiscal year 2000 and
8 \$49,800,000 for fiscal year 2001 shall be for Science
9 Program Direction;

10 (10) \$17,900,000 for fiscal year 2000 and
11 \$13,100,000 for fiscal year 2001 shall be for Spall-
12 ation Neutron Source research and development;
13 and

14 (11) \$100,000,000 for fiscal year 2000 shall be
15 for construction of Project 99-E-334, Spallation
16 Neutron Source, Oak Ridge National Laboratory,
17 Oak Ridge, Tennessee.

18 (c) FOSSIL ENERGY RESEARCH AND DEVELOP-
19 MENT.—There are authorized to be appropriated to the
20 Secretary for Fossil Energy Research and Development ci-
21 vilian energy and scientific research, development, and
22 demonstration and related commercial application of en-
23 ergy technology operation and maintenance programs,
24 projects, and activities for which specific sums are not au-
25 thorized under other authority of law \$397,564,000 for

1 fiscal year 2000 and \$427,102,000 for fiscal year 2001,
2 to remain available through the end of fiscal year 2002,
3 of which—

4 (1) \$126,609,000 for fiscal year 2000 and
5 \$126,614,000 for fiscal year 2001 shall be for Coal,
6 including—

7 (A) \$5,250,000 for fiscal year 2000 and
8 \$5,407,000 for fiscal year 2001 for Coal Prepa-
9 ration;

10 (B) \$1,641,000 for fiscal year 2000 for
11 Direct Liquefaction;

12 (C) \$6,659,000 for fiscal year 2000 and
13 \$6,859,000 for fiscal year 2001 for Indirect
14 Liquefaction;

15 (D) \$2,200,000 for fiscal year 2000 and
16 \$2,310,000 for fiscal year 2001 for Advanced
17 Clean Fuels Research Advanced Research and
18 Environmental Technology;

19 (E) \$3,000,000 for fiscal year 2000 for
20 Advanced Pulverized Coal-Fired Powerplant;

21 (F) \$7,010,000 for fiscal year 2000 and
22 \$7,220,000 for fiscal year 2001 for Indirect
23 Fired Cycle;

1 (G) \$38,661,000 for fiscal year 2000 and
2 \$39,821,000 for fiscal year 2001 for High-Effi-
3 ciency-Integrated Gasification Combined Cycle;

4 (H) \$15,077,000 for fiscal year 2000 and
5 \$15,529,000 for fiscal year 2001 for High-Effi-
6 ciency Pressurized Fluidized Bed;

7 (I) \$23,864,000 for fiscal year 2000 and
8 \$25,057,000 for fiscal year 2001 for Advanced
9 Clean/Efficient Power Systems Advanced Re-
10 search and Environmental Technology; and

11 (J) \$23,247,000 for fiscal year 2000 and
12 \$24,410,000 for fiscal year 2001 for Advanced
13 Research and Technology Development;

14 (2) \$50,574,000 for fiscal year 2000 and
15 \$52,091,000 for fiscal year 2001 shall be for Oil
16 Technology, including—

17 (A) \$31,720,000 for fiscal year 2000 and
18 \$32,671,000 for fiscal year 2001 for Explo-
19 ration and Production Supporting Research;

20 (B) \$8,034,000 for fiscal year 2000 and
21 \$8,275,000 for fiscal year 2001 for Recovery
22 Field Demonstrations; and

23 (C) \$10,820,000 for fiscal year 2000 and
24 \$11,145,000 for fiscal year 2001 for Oil Tech-
25 nology Effective Environmental Protection;

1 (3) \$107,916,000 for fiscal year 2000 and
2 \$108,831,000 for fiscal year 2001 shall be for Gas,
3 including—

4 (A) \$14,932,000 for fiscal year 2000 and
5 \$15,380,000 for fiscal year 2001 for Natural
6 Gas Research Exploration and Production;

7 (B) \$1,030,000 for fiscal year 2000 and
8 \$1,061,000 for fiscal year 2001 for Natural
9 Gas Research Delivery and Storage;

10 (C) \$41,808,000 for fiscal year 2000 and
11 \$41,808,000 for fiscal year 2001 for Natural
12 Gas Research Advanced Turbine Systems;

13 (D) \$9,330,000 for fiscal year 2000 and
14 \$9,610,000 for fiscal year 2001 for Natural
15 Gas Research Emerging Processing Technology
16 Applications;

17 (E) \$3,108,000 for fiscal year 2000 and
18 \$3,201,000 for fiscal year 2001 for Natural
19 Gas Effective Environmental Protection;

20 (F) \$1,260,000 for fiscal year 2000 and
21 \$1,323,000 for fiscal year 2001 for Fuel Cells
22 Advanced Research; and

23 (G) \$36,449,000 for fiscal year 2000 and
24 \$36,449,000 for fiscal year 2001 for Fuel Cells
25 Systems;

1 (4) \$71,114,000 for fiscal year 2000 and
2 \$72,796,000 for fiscal year 2001 shall be for Pro-
3 gram Direction and Management Support, includ-
4 ing—

5 (A) \$15,049,000 for fiscal year 2000 and
6 \$15,049,000 for fiscal year 2001 for Head-
7 quarters Program Direction; and

8 (B) \$56,065,000 for fiscal year 2000 and
9 \$57,747,000 for fiscal year 2001 for Energy
10 Technology Center Program Direction;

11 (5) \$2,000,000 for fiscal year 2000 and
12 \$2,060,000 for fiscal year 2001 shall be for GP-F-
13 100, Plant and Capital Equipment, at Energy Tech-
14 nology Center sites;

15 (6) \$7,148,000 for fiscal year 2000 and
16 \$7,537,000 for fiscal year 2001 shall be for Cooper-
17 ative Research and Development;

18 (7) \$2,173,000 for fiscal year 2000 and
19 \$2,173,000 for fiscal year 2001 shall be for Fuels
20 Conversion, Natural Gas, and Electricity;

21 (8) \$5,000,000 for fiscal year 2000 and
22 \$5,000,000 for fiscal year 2001 shall be for Ad-
23 vanced Metallurgical Processes; and

24 (9) \$25,000,000 for fiscal year 2000 and
25 \$50,000,000 for fiscal year 2001 shall be for a Fos-

1 sil Energy Science Initiative to be managed by the
2 Assistant Secretary for Fossil Energy in consulta-
3 tion with the Director of the Office of Science, for
4 grants to be competitively awarded and subject to
5 peer review for research relating to fossil energy.
6 The Secretary shall submit to the Committee on
7 Science and the Committee on Appropriations of the
8 House of Representatives, and to the Committee on
9 Energy and Natural Resources and the Committee
10 on Appropriations of the Senate, an annual report
11 on the activities of the Fossil Energy Science Initia-
12 tive, including a description of the process used to
13 award the funds and an explanation of how the re-
14 search relates to fossil energy.

15 (d) ENERGY CONSERVATION RESEARCH AND DEVEL-
16 OPMENT.—There are authorized to be appropriated to the
17 Secretary for Energy Conservation Research and Develop-
18 ment civilian energy and scientific research, development,
19 and demonstration and related application of energy tech-
20 nology operation and maintenance programs, projects, and
21 activities for which specific sums are not authorized under
22 other authority of law \$577,915,000 for fiscal year 2000
23 and \$619,502,480 for fiscal year 2001, to remain available
24 through the end of fiscal year 2002, of which—

1 (1) \$246,999,000 for fiscal year 2000 and
2 \$254,409,000 for fiscal year 2001 shall be for the
3 Transportation Sector, including—

4 (A) \$168,080,000 for fiscal year 2000 and
5 \$173,122,400 for fiscal year 2001 for Vehicle
6 Technology Research and Development;

7 (B) \$23,500,000 for fiscal year 2000 and
8 \$24,205,000 for fiscal year 2001 for Fuels Uti-
9 lization Research and Development, of which
10 \$2,500,000 for fiscal year 2000 and \$2,750,000
11 for fiscal year 2001 shall be for biodiesel fuel
12 research and development;

13 (C) \$7,000,000 for fiscal year 2000 and
14 \$7,210,000 for fiscal year 2001 for Technology
15 Deployment;

16 (D) \$38,599,000 for fiscal year 2000 and
17 \$39,757,000 for fiscal year 2001 for Materials
18 Technology; and

19 (E) \$9,820,000 for fiscal year 2000 and
20 \$10,114,600 for fiscal year 2001 for Manage-
21 ment and Planning;

22 (2) \$171,000,000 for fiscal year 2000 and
23 \$176,130,000 for fiscal year 2001 shall be for the
24 Industry Sector, including—

1 (A) \$74,000,000 for fiscal year 2000 and
2 \$76,220,000 for fiscal year 2001 for Industries
3 of the Future (Specific);

4 (B) \$87,600,000 for fiscal year 2000 and
5 \$90,228,000 for fiscal year 2001 for Industries
6 of the Future (Crosscutting); and

7 (C) \$9,400,000 for fiscal year 2000 and
8 \$9,682,000 for fiscal year 2001 for Manage-
9 ment and Planning;

10 (3) \$92,116,000 for fiscal year 2000 and
11 \$94,879,480 for fiscal year 2001 shall be for the
12 Building Technology, State and Community Sector
13 (nongrants), including—

14 (A) \$62,018,000 for fiscal year 2000 and
15 \$63,878,540 for fiscal year 2001 for Building
16 Research; and

17 (B) \$30,098,000 for fiscal year 2000 and
18 \$31,000,940 for fiscal year 2001 for Building
19 Technology Assistance (nongrants);

20 (4) \$42,800,000 for fiscal year 2000 and
21 \$44,084,000 for fiscal year 2001 shall be for Policy
22 and Management; and

23 (5) \$25,000,000 for fiscal year 2000 and
24 \$50,000,000 for fiscal year 2001 shall be for an En-
25 ergy Efficiency Science Initiative to be managed by

1 the Assistant Secretary for Energy Efficiency and
2 Renewable Energy in consultation with the Director
3 of the Office of Science, for grants to be competi-
4 tively awarded and subject to peer review for re-
5 search relating to energy efficiency. The Secretary
6 shall submit to the Committee on Science and the
7 Committee on Appropriations of the House of Rep-
8 resentatives, and to the Committee on Energy and
9 Natural Resources and the Committee on Appropria-
10 tions of the Senate, an annual report on the activi-
11 ties of the Energy Efficiency Science Initiative, in-
12 cluding a description of the process used to award
13 the funds and an explanation of how the research re-
14 lates to energy efficiency.

15 (e) **ADDITIONAL AUTHORIZATION.**—The Secretary
16 shall designate \$2,000,000 of the amounts authorized by
17 this section for each fiscal year for biometric technology
18 security, including Iris Recognition Technology.

19 **SEC. 4. GAS HYDRATE ENERGY AND SCIENTIFIC AND ENVI-**
20 **RONMENTAL RESEARCH AND DEVELOPMENT**
21 **PROGRAM.**

22 (a) **IN GENERAL.**—Not later than 180 days after the
23 date of enactment of this Act, the Secretary, acting
24 through the Assistant Secretary for Fossil Energy, shall

1 commence a program of gas hydrate energy and scientific
2 and environmental research and development.

3 (b) GRANTS, CONTRACTS, COOPERATIVE AGREE-
4 MENTS, INTERAGENCY FUNDS TRANSFER AGREEMENTS,
5 AND FIELD WORK PROPOSALS.—

6 (1) ASSISTANCE.—The Secretary, acting
7 through the Assistant Secretary for Fossil Energy,
8 may award grants or contracts to, or enter into co-
9 operative agreements with, institutions of higher
10 education and industrial enterprises to conduct en-
11 ergy and scientific and environmental research, de-
12 velopment, and demonstration programs on gas hy-
13 drate.

14 (2) PEER REVIEW.—Funds made available
15 under paragraph (1) for initiating contracts, grants,
16 cooperative agreements, interagency funds transfer
17 agreements, and field work proposals shall be made
18 available based on a competitive selection process
19 and a peer review of proposals. Exceptions shall be
20 considered on a case-by-case basis, and reported by
21 the Secretary, acting through the Assistant Sec-
22 retary for Fossil Energy, to the Committee on
23 Science of the House of Representatives and the
24 Committee on Energy and Natural Resources of the
25 Senate 30 days prior to any such award.

1 (c) CONSULTATION.—The Secretary, acting through
2 the Assistant Secretary for Fossil Energy, may establish
3 an advisory panel consisting of experts from industry, in-
4 stitutions of higher education, and other entities as the
5 Secretary considers appropriate, to assist in developing
6 recommendations and priorities for the gas hydrate re-
7 search and development program carried out under sub-
8 section (a).

9 (d) LIMITATIONS.—

10 (1) ADMINISTRATIVE EXPENSES.—Not more
11 than 5 percent of the amount made available to
12 carry out this section for a fiscal year may be used
13 by the Secretary, acting through the Assistant Sec-
14 retary for Fossil Energy, for expenses associated
15 with the administration of the program carried out
16 under subsection (a).

17 (2) CONSTRUCTION COSTS.—None of the funds
18 made available to carry out this section may be used
19 for the construction of a new building or the acquisi-
20 tion, expansion, remodeling, or alteration of an exist-
21 ing building (including site grading and improve-
22 ment and architect fees).

23 (e) DEFINITIONS.—For purposes of this section:

1 (1) CONTRACT.—The term “contract” means a
2 procurement contract within the meaning of section
3 6303 of title 31, United States Code.

4 (2) COOPERATIVE AGREEMENT.—The term “co-
5 operative agreement” means a cooperative agree-
6 ment within the meaning of section 6305 of title 31,
7 United States Code.

8 (3) GRANT.—The term “grant” means a grant
9 awarded under a grant agreement, within the mean-
10 ing of section 6304 of title 31, United States Code.

11 (4) INSTITUTION OF HIGHER EDUCATION.—The
12 term “institution of higher education” means an in-
13 stitution of higher education, within the meaning of
14 section 1201(a) of the Higher Education Act of 1965
15 (20 U.S.C. 1141(a)).

16 (f) AUTHORIZATION OF APPROPRIATIONS.—Of the
17 amounts authorized under section 3(c)(3), \$5,000,000 for
18 fiscal year 2000 and \$7,500,000 for fiscal year 2001 shall
19 be available for carrying out this section.

20 **SEC. 5. NOTICE.**

21 (a) REPROGRAMMING.—The Secretary may use for
22 any authorized activities of the Department under this
23 Act—

24 (1) up to the lesser of \$250,000 or 5 percent
25 of the total funding for a fiscal year of a civilian en-

1 energy or scientific research, development, or dem-
2 onstration or related commercial application of en-
3 ergy technology program, project, or activity of the
4 Department; or

5 (2) after the expiration of 60 days after trans-
6 mitting to the Committee on Science and the Com-
7 mittee on Appropriations of the House of Represent-
8 atives, and to the Committee on Energy and Natural
9 Resources and the Committee on Appropriations of
10 the Senate, a report described in subsection (b), up
11 to 25 percent of the total funding for a fiscal year
12 of a civilian energy or scientific research, develop-
13 ment, or demonstration or related commercial appli-
14 cation of energy technology program, project, or ac-
15 tivity of the Department.

16 (b) REPORT.—(1) The report referred to in sub-
17 section (a)(2) is a report containing a full and complete
18 statement of the action proposed to be taken and the facts
19 and circumstances relied upon in support of such proposed
20 action.

21 (2) In the computation of the 60-day period under
22 subsection (a)(2), there shall be excluded any day on
23 which either House of Congress is not in session because
24 of an adjournment of more than 3 days to a day certain.

1 (c) LIMITATIONS.—In no event may funds be used
2 pursuant to subsection (a) for a program, project, or activ-
3 ity for which funding has been requested to the Congress
4 but which has not been funded by the Congress.

5 (d) NOTICE OF REORGANIZATION.—The Secretary
6 shall provide notice to the Committee on Science and the
7 Committee on Appropriations of the House of Representa-
8 tives, and to the Committee on Energy and Natural Re-
9 sources and the Committee on Appropriations of the Sen-
10 ate, not later than 15 days before any major reorganiza-
11 tion of any civilian energy or scientific research, develop-
12 ment, or demonstration or related commercial application
13 of energy technology program, project, or activity of the
14 Department.

15 (e) COPY OF REPORTS.—The Secretary shall provide
16 copies to the Committee on Science and the Committee
17 on Appropriations of the House of Representatives, and
18 to the Committee on Energy and Natural Resources and
19 the Committee on Appropriations of the Senate, of any
20 report relating to the civilian energy or scientific research,
21 development, or demonstration or related commercial ap-
22 plication of energy technology programs, projects, and ac-
23 tivities of the Department prepared at the direction of any
24 committee of Congress.

1 **SEC. 6. LIMITATION ON DEMONSTRATIONS.**

2 (a) IN GENERAL.—The Department shall provide
3 funding for civilian energy or scientific or related commer-
4 cial application of energy technology demonstration pro-
5 grams, projects, and activities only for technologies or
6 processes that can be reasonably expected to yield new,
7 measurable benefits to the cost, efficiency, or performance
8 of the technology or process.

9 (b) PARALLEX PROJECT.—The Secretary shall not,
10 as part of the test and demonstration Parallelex Project,
11 select a route for the transportation of Mixed Oxide Fuel
12 from Los Alamos, New Mexico, to Chalk River, Canada,
13 without issuing a rule based on the record after an oppor-
14 tunity for agency hearing.

15 **SEC. 7. LIMITS ON GENERAL PLANT PROJECTS.**

16 If, at any time during the construction of a civilian
17 energy or scientific research, development, or demonstra-
18 tion or related commercial application of energy tech-
19 nology project of the Department for which no specific
20 funding level is provided by law, the estimated cost (in-
21 cluding any revision thereof) of the project exceeds
22 \$2,000,000, the Secretary may not continue such con-
23 struction unless the Secretary has furnished a complete
24 report to the Committee on Science and the Committee
25 on Appropriations of the House of Representatives, and
26 to the Committee on Energy and Natural Resources and

1 the Committee on Appropriations of the Senate, explain-
2 ing the project and the reasons for the estimate or revi-
3 sion.

4 **SEC. 8. LIMITS ON CONSTRUCTION PROJECTS.**

5 (a) LIMITATION.—Except as provided in subsection
6 (b), construction on a civilian energy or scientific research,
7 development, or demonstration or related commercial ap-
8 plication of energy technology project of the Department
9 for which funding has been specifically provided by law
10 may not be started, and additional obligations may not
11 be incurred in connection with the project above the au-
12 thorized funding amount, whenever the current estimated
13 cost of the construction project exceeds by more than 10
14 percent the higher of—

15 (1) the amount authorized for the project, if the
16 entire project has been funded by the Congress; or

17 (2) the amount of the total estimated cost for
18 the project as shown in the most recent budget jus-
19 tification data submitted to Congress.

20 (b) NOTICE.—An action described in subsection (a)
21 may be taken if—

22 (1) the Secretary has submitted to the Com-
23 mittee on Science and the Committee on Appropria-
24 tions of the House of Representatives, and to the
25 Committee on Energy and Natural Resources and

1 the Committee on Appropriations of the Senate, a
2 report on the proposed actions and the cir-
3 cumstances making such actions necessary; and

4 (2) a period of 30 days has elapsed after the
5 date on which the report is received by the commit-
6 tees.

7 (c) EXCLUSION.—In the computation of the 30-day
8 period described in subsection (b)(2), there shall be ex-
9 cluded any day on which either House of Congress is not
10 in session because of an adjournment of more than 3 days
11 to a day certain.

12 (d) EXCEPTION.—Subsections (a) and (b) shall not
13 apply to any construction project which has a current esti-
14 mated cost of less than \$2,000,000.

15 **SEC. 9. AUTHORITY FOR CONCEPTUAL AND CONSTRUC-**
16 **TION DESIGN.**

17 (a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1)
18 Subject to paragraph (2) and except as provided in para-
19 graph (3), before submitting to Congress a request for
20 funds for a construction project that is in support of a
21 civilian energy or scientific research, development, or dem-
22 onstration or related commercial application of energy
23 technology program, project, or activity of the Depart-
24 ment, the Secretary shall complete a conceptual design for
25 that project.

1 (2) If the estimated cost of completing a conceptual
2 design for a construction project exceeds \$750,000, the
3 Secretary shall submit to Congress a request for funds for
4 the conceptual design before submitting a request for
5 funds for the construction project.

6 (3) The requirement in paragraph (1) does not apply
7 to a request for funds for a construction project, the total
8 estimated cost of which is less than \$2,000,000.

9 (b) **AUTHORITY FOR CONSTRUCTION DESIGN.**—(1)
10 The Secretary may carry out construction design (includ-
11 ing architectural and engineering services) in connection
12 with any proposed construction project that is in support
13 of a civilian energy or scientific research, development,
14 and demonstration or related commercial application of
15 energy technology program, project, or activity of the De-
16 partment if the total estimated cost for such design does
17 not exceed \$250,000.

18 (2) If the total estimated cost for construction design
19 in connection with any construction project described in
20 paragraph (1) exceeds \$250,000, funds for such design
21 must be specifically authorized by law.

22 **SEC. 10. LIMITS ON USE OF FUNDS.**

23 (a) **CONSTRUCTION OF SPALLATION NEUTRON**
24 **SOURCE PROJECT.**—None of the funds authorized by sec-
25 tion 3(b)(11) may be obligated until—

1 (1) the Secretary certifies in writing to the
2 Committee on Science of the House of Representa-
3 tives and the Committee on Energy and Natural Re-
4 sources of the Senate that senior project manage-
5 ment positions for the project have been filled by
6 qualified individuals; and

7 (2) the Secretary provides the Committee on
8 Science and the Committee on Appropriations of the
9 House of Representatives, and the Committee on
10 Energy and Natural Resources and the Committee
11 on Appropriations of the Senate, with—

12 (A) a cost baseline and project milestones
13 for each major construction and technical sys-
14 tem activity, consistent with the overall cost
15 and schedule submitted with the Department's
16 fiscal year 2000 budget, that have been re-
17 viewed and certified by an independent entity,
18 outside the Department and having no financial
19 interest in the project, as the most cost-effective
20 way to complete the project;

21 (B) binding legal agreements that specify
22 the duties and obligations of each laboratory of
23 the Department in carrying out the project;

24 (C) a revised project management struc-
25 ture that integrates the staff of the collabo-

1 rating laboratories working on the project
2 under a single project director, who shall have
3 direct supervisory responsibility over the car-
4 rying out of the duties and obligations de-
5 scribed in subparagraph (B); and

6 (D) official delegation by the Secretary of
7 primary authority with respect to the project to
8 the project director; and

9 (3) the Comptroller General reports to the Con-
10 gress, on the basis of available information, that the
11 tax reimbursements that the Comptroller General es-
12 timates the Department would pay to its contractors
13 as a cost of constructing the Spallation Neutron
14 Source at Oak Ridge National Laboratory in Ten-
15 nessee would be no more than the tax reimburse-
16 ments it would pay if the same project were con-
17 structed at the Lawrence Berkeley National Labora-
18 tory in California, the Argonne National Laboratory
19 in Illinois, the Los Alamos National Laboratory in
20 New Mexico, or the Brookhaven National Labora-
21 tory in New York.

22 The Secretary shall report on the Spallation Neutron
23 Source Project 99–E–334 annually, as part of the Depart-
24 ment’s annual budget submission, including a description
25 of the achievement of milestones, a comparison of actual

1 costs to estimated costs, and any changes in estimated
2 project costs or schedule.

3 (b) INTERNATIONAL THERMONUCLEAR EXPERI-
4 MENTAL REACTOR (ITER) ENGINEERING DESIGN AC-
5 TIVITIES (EDA).—None of the funds authorized by this
6 Act may be used either directly or indirectly for United
7 States participation in International Thermonuclear Ex-
8 perimental Reactor (ITER) Engineering Design Activities
9 (EDA).

10 (c) OFFICE OF SCIENCE.—None of the funds author-
11 ized by this Act may be used either directly or indirectly
12 to fund the salary of an individual holding the position
13 of Director or Deputy Director of the Office of Science,
14 or Associate Director (except for the Office of Laboratory
15 Policy and the Office of Resource Management), or Direc-
16 tor, Office of Planning and Analysis within the Depart-
17 ment's Office of Science unless such individual holds a
18 postgraduate degree in science or engineering.

19 (d) TRAVEL.—Not more than 1 percent of the funds
20 authorized by this Act may be used either directly or indi-
21 rectly to fund travel costs of the Department or travel
22 costs for persons awarded contracts or subcontracts by the
23 Department. As part of the Department's annual budget
24 request submission to the Congress, the Secretary shall
25 submit a report to the Committee on Science and the

1 Committee on Appropriations of the House of Representa-
2 tives, and to the Committee on Energy and Natural Re-
3 sources and the Committee on Appropriations of the Sen-
4 ate, that identifies—

5 (1) the estimated amount of travel costs by the
6 Department and for persons awarded contracts or
7 subcontracts by the Department for the fiscal year
8 of such budget submission, as well as for the 2 pre-
9 vious fiscal years;

10 (2) the major purposes for such travel; and

11 (3) the sources of funds for such travel.

12 (e) TRADE ASSOCIATIONS.—No funds authorized by
13 this Act may be used either directly or indirectly to fund
14 a grant, contract, subcontract, or any other form of finan-
15 cial assistance awarded by the Department to a trade as-
16 sociation on a noncompetitive basis. As part of the Depart-
17 ment’s annual budget request submission to the Congress,
18 the Secretary shall submit a report to the Committee on
19 Science and the Committee on Appropriations of the
20 House of Representatives, and to the Committee on En-
21 ergy and Natural Resources and the Committee on Appro-
22 priations of the Senate, that identifies—

23 (1) the estimated amount of funds provided by
24 the Department to trade associations, by trade asso-

1 ciation, for the fiscal year of such budget submis-
2 sion, as well as for the 2 previous fiscal years;

3 (2) the services either provided or to be pro-
4 vided by each such trade association; and

5 (3) the sources of funds for services provided by
6 each such trade association.

7 (f) REDUCTIONS.—Notwithstanding any other provi-
8 sion of this Act—

9 (1) each of the amounts authorized by this Act
10 for fiscal year 2000 shall be reduced by 1 percent;

11 (2) each of the amounts authorized by this Act
12 for fiscal year 2000, as reduced pursuant to para-
13 graph (1), shall be further reduced by .7674 percent,
14 with such reduction representing a reduction in trav-
15 el costs; and

16 (3) each of the amounts authorized by this Act
17 for fiscal year 2000 for administrative expenses, in-
18 cluding program management, shall be further re-
19 duced proportionately to achieve additional savings
20 of \$30,000,000.

21 **SEC. 11. MANAGEMENT AND OPERATING CONTRACTS.**

22 (a) COMPETITIVE PROCEDURE REQUIREMENT.—
23 None of the funds authorized to be appropriated by this
24 Act for civilian energy or scientific research, development,
25 and demonstration or related commercial application of

1 energy technology programs, projects, and activities may
2 be used to award a management and operating contract
3 for a federally owned or operated civilian energy labora-
4 tory of the Department unless such contract is awarded
5 using competitive procedures or the Secretary grants, on
6 a case-by-case basis, a waiver to allow for such a deviation.
7 The Secretary may not delegate the authority to grant
8 such a waiver.

9 (b) CONGRESSIONAL NOTICE.—At least 60 days be-
10 fore a contract award, amendment, or modification for
11 which the Secretary intends to grant such a waiver, the
12 Secretary shall submit to the Committee on Science and
13 the Committee on Appropriations of the House of Rep-
14 resentatives, and to the Committee on Energy and Nat-
15 ural Resources and the Committee on Appropriations of
16 the Senate, a report notifying the committees of the waiver
17 and setting forth the reasons for the waiver.

18 **SEC. 12. FEDERAL ACQUISITION REGULATION.**

19 (a) REQUIREMENT.—None of the funds authorized to
20 be appropriated by this Act for civilian energy or scientific
21 research, development, and demonstration or related com-
22 mercial application of energy technology programs,
23 projects, and activities may be used to award, amend, or
24 modify a contract of the Department in a manner that
25 deviates from the Federal Acquisition Regulation, unless

1 the Secretary grants, on a case-by-case basis, a waiver to
2 allow for such a deviation. The Secretary may not delegate
3 the authority to grant such a waiver.

4 (b) CONGRESSIONAL NOTICE.—At least 60 days be-
5 fore a contract award, amendment, or modification for
6 which the Secretary intends to grant such a waiver, the
7 Secretary shall submit to the Committee on Science and
8 the Committee on Appropriations of the House of Rep-
9 resentatives, and to the Committee on Energy and Nat-
10 ural Resources and the Committee on Appropriations of
11 the Senate, a report notifying the committees of the waiver
12 and setting forth the reasons for the waiver.

13 **SEC. 13. REQUESTS FOR PROPOSALS.**

14 None of the funds authorized to be appropriated by
15 this Act may be used by the Department to prepare or
16 initiate Requests for Proposals (RFPs) for a civilian en-
17 ergy or scientific research, development, and demonstra-
18 tion or related commercial application of energy tech-
19 nology program, project, or activity if the program,
20 project, or activity has not been specifically authorized by
21 Congress.

22 **SEC. 14. PRODUCTION OR PROVISION OF ARTICLES OR**
23 **SERVICES.**

24 None of the funds authorized to be appropriated by
25 this Act may be used by any civilian energy or scientific

1 research, development, and demonstration or related com-
2 mercial application of energy technology program, project,
3 or activity of the Department to produce or provide arti-
4 cles or services for the purpose of selling the articles or
5 services to a person outside the Federal Government, un-
6 less the Secretary determines that comparable articles or
7 services are not available from a commercial source in the
8 United States.

9 **SEC. 15. ELIGIBILITY FOR AWARDS.**

10 (a) IN GENERAL.—The Secretary shall exclude from
11 consideration for grant agreements for civilian energy and
12 scientific research, development, and demonstration or re-
13 lated commercial application of energy technology pro-
14 grams, projects, and activities made by the Department
15 after fiscal year 1999 any person who received funds,
16 other than those described in subsection (b), appropriated
17 for a fiscal year after fiscal year 1999, under a grant
18 agreement from any Federal funding source for a pro-
19 gram, project, or activity that was not subjected to a com-
20 petitive, merit-based award process, except as specifically
21 authorized by this Act. Any exclusion from consideration
22 pursuant to this section shall be effective for a period of
23 5 years after the person receives such Federal funds.

24 (b) EXCEPTION.—Subsection (a) shall not apply to
25 the receipt of Federal funds by a person due to the mem-

1 bership of that person in a class specified by law for which
2 assistance is awarded to members of the class according
3 to a formula provided by law or under circumstances per-
4 mitting other than full and open competition under the
5 Federal Acquisition Regulation.

6 (c) DEFINITION.—For purposes of this section, the
7 term “grant agreement” means a legal instrument whose
8 principal purpose is to transfer a thing of value to the
9 recipient to carry out a public purpose of support or stim-
10 ulation authorized by a law of the United States, and does
11 not include the acquisition (by purchase, lease, or barter)
12 of property or services for the direct benefit or use of the
13 United States Government. Such term does not include
14 a cooperative agreement (as such term is used in section
15 6305 of title 31, United States Code) or a cooperative re-
16 search and development agreement (as such term is de-
17 fined in section 12(d)(1) of the Stevenson-Wydler Tech-
18 nology Innovation Act of 1980 (15 U.S.C. 3710a(d)(1))).

19 **SEC. 16. INTERNET AVAILABILITY OF INFORMATION.**

20 The Secretary shall make available through the Inter-
21 net home page of the Department the abstracts relating
22 to all research grants and awards made with funds author-
23 ized by this Act. Nothing in this section shall be construed
24 to require or permit the release of any information prohib-
25 ited by law or regulation from being released to the public.

1 **SEC. 17. FOREIGN VISITORS PROGRAM.**

2 (a) PROHIBITION.—Except as provided in subsection
3 (b) or (c), the Secretary may not admit to any classified
4 area of any federally owned or operated nonmilitary en-
5 ergy laboratory any individual who is a citizen of a nation
6 that is named on the Department of Energy List of Sen-
7 sitive Countries.

8 (b) WAIVER AUTHORITY.—(1) The Secretary may
9 waive the prohibition in subsection (a) on a case-by-case
10 basis with respect to individuals whose admission to a fed-
11 erally owned or operated nonmilitary energy laboratory is
12 determined by the Secretary to be necessary for the fur-
13 therance of civilian science interests of the United States.

14 (2) Not later than 30 days after granting a waiver
15 under paragraph (1), the Secretary shall transmit to the
16 Committee on Science of the House of Representatives
17 and the Committee on Energy and Natural Resources of
18 the Senate a report in writing providing notice of the waiv-
19 er. The report shall identify each individual for whom a
20 waiver is granted and, with respect to each such indi-
21 vidual, provide a detailed justification for the waiver and
22 the Secretary's certification that the admission of that in-
23 dividual to a federally owned or operated nonmilitary en-
24 ergy laboratory is necessary for the furtherance of civilian
25 science interests of the United States.

1 (3) The authority of the Secretary under paragraph
2 (1) may not be delegated.

3 (c) APPLICATION.—This section shall not apply to
4 the Ames Laboratory, the Environmental Measurement
5 Laboratory, the Ernest Orlando Lawrence Berkeley Na-
6 tional Laboratory, the Federal Energy Technology Center,
7 the Fermi National Accelerator Laboratory, the Lawrence
8 Livermore National Laboratory, the Los Alamos National
9 Laboratory, the National Renewable Energy Laboratory,
10 the Princeton Plasma Physics Laboratory, the Radio-
11 logical and Environmental Sciences Laboratory, the
12 Sandia National Laboratories, the Stanford Linear Accel-
13 erator Center, the Thomas Jefferson National Accelerator
14 Facility, or the Y-12 Plant.

15 **SEC. 18. COMPLIANCE WITH BUY AMERICAN ACT.**

16 No funds authorized pursuant to this Act may be ex-
17 pended by an entity unless the entity agrees that in ex-
18 pending the assistance the entity will comply with sections
19 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a-
20 10c, popularly known as the “Buy American Act”).

21 **SEC. 19. SENSE OF THE CONGRESS; REQUIREMENT RE-**
22 **GARDING NOTICE.**

23 (a) PURCHASE OF AMERICAN-MADE EQUIPMENT
24 AND PRODUCTS.—In the case of any equipment or prod-
25 ucts that may be authorized to be purchased with financial

1 assistance provided under this Act, it is the sense of the
2 Congress that entities receiving such assistance should, in
3 expending the assistance, purchase only American-made
4 equipment and products.

5 (b) NOTICE TO RECIPIENTS OF ASSISTANCE.—In
6 providing financial assistance under this Act, the Sec-
7 retary shall provide to each recipient of the assistance a
8 notice describing the statement made in subsection (a) by
9 the Congress.

10 **SEC. 20. PROHIBITION OF CONTRACTS.**

11 If it has been finally determined by a court or Federal
12 agency that any person intentionally affixed a label bear-
13 ing a “Made in America” inscription, or any inscription
14 with the same meaning, to any product sold in or shipped
15 to the United States that is not made in the United
16 States, such person shall be ineligible to receive any con-
17 tract or subcontract made with funds provided pursuant
18 to this Act, pursuant to the debarment, suspension, and
19 ineligibility procedures described in section 9.400 through
20 9.409 of title 48, Code of Federal Regulations.

21 **SEC. 21. NUCLEAR WASTE TRANSMUTATION RESEARCH**
22 **AND DEVELOPMENT PROGRAM.**

23 (a) IN GENERAL.—Not later than 180 days after the
24 date of enactment of this Act, the Secretary shall com-
25 mence a program of research and development on the

1 technology necessary to achieve onsite transmutation of
2 nuclear waste into nonradioactive substances.

3 (b) GRANTS, CONTRACTS, COOPERATIVE AGREE-
4 MENTS, INTERAGENCY FUNDS TRANSFER AGREEMENTS,
5 AND FIELD WORK PROPOSALS.—

6 (1) ASSISTANCE.—The Secretary may award
7 grants or contracts to, or enter into cooperative
8 agreements with, institutions of higher education
9 and industrial enterprises to conduct a research, de-
10 velopment, and demonstration program on the tech-
11 nology necessary to achieve onsite transmutation of
12 nuclear waste into nonradioactive substances in a
13 manner consistent with United States environmental
14 and nonproliferation policy. The Secretary shall not
15 support a technology under this section that involves
16 the isolation of plutonium or uranium.

17 (2) PEER REVIEW.—Funds made available
18 under paragraph (1) for initiating contracts, grants,
19 cooperative agreements, interagency funds transfer
20 agreements, and field work proposals shall be made
21 available based on a competitive selection process
22 and a peer review of proposals. Exceptions shall be
23 considered on a case-by-case basis, and reported by
24 the Secretary to the Committee on Science of the
25 House of Representatives and the Committee on En-

1 ergy and Natural Resources of the Senate 30 days
2 prior to any such award.

3 (c) CONSULTATION.—The Secretary may establish an
4 advisory panel consisting of experts from industry, institu-
5 tions of higher education, and other entities as the Sec-
6 retary considers appropriate, to assist in developing rec-
7 ommendations and priorities for the research, develop-
8 ment, and demonstration program carried out under sub-
9 section (a).

10 (d) LIMITATIONS.—

11 (1) ADMINISTRATIVE EXPENSES.—Not more
12 than 5 percent of the amount made available to
13 carry out this section for a fiscal year may be used
14 by the Secretary for expenses associated with the ad-
15 ministration of the program carried out under sub-
16 section (a).

17 (2) CONSTRUCTION COSTS.—None of the funds
18 made available to carry out this section may be used
19 for the construction of a new building or the acquisi-
20 tion, expansion, remodeling, or alteration of an exist-
21 ing building (including site grading and improve-
22 ment and architect fees).

23 (e) DEFINITIONS.—For purposes of this section:

1 (1) CONTRACT.—The term “contract” means a
2 procurement contract within the meaning of section
3 6303 of title 31, United States Code.

4 (2) COOPERATIVE AGREEMENT.—The term “co-
5 operative agreement” means a cooperative agree-
6 ment within the meaning of section 6305 of title 31,
7 United States Code.

8 (3) GRANT.—The term “grant” means a grant
9 awarded under a grant agreement, within the mean-
10 ing of section 6304 of title 31, United States Code.

11 (4) INSTITUTION OF HIGHER EDUCATION.—The
12 term “institution of higher education” means an in-
13 stitution of higher education, within the meaning of
14 section 1201(a) of the Higher Education Act of
15 1965 (20 U.S.C. 1141(a)).

16 (f) AUTHORIZATION OF APPROPRIATIONS.—Of the
17 amounts authorized under section 3(a)(2)(G), \$2,000,000
18 for fiscal year 2000 and \$4,000,000 for fiscal year 2001
19 shall be available for carrying out this section.

20 **SEC. 22. MINORITY RECRUITMENT AND EMPLOYMENT.**

21 It is the sense of the Congress that the Department
22 should increase its efforts to recruit and employ qualified

- 1 minorities for carrying out the research and development
- 2 functions of the Department.

Passed the House of Representatives September 15,
1999.

Attest:

Clerk±