

108TH CONGRESS
1ST SESSION

H. R. 34

To authorize appropriations for fiscal years 2004, 2005, 2006, and 2007 for the Department of Energy Office of Science, to ensure that the United States is the world leader in key scientific fields by restoring a healthy balance of science funding, to ensure maximum utilization of the national user facilities, and to secure the Nation's supply of scientists for the 21st century, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 7, 2003

Mrs. BIGGERT (for herself, Mr. EHLERS, Mrs. TAUSCHER, Mr. ANDREWS, Mr. BOSWELL, Mr. JOHNSON of Illinois, Mr. HOLT, Mr. TOM DAVIS of Virginia, Mr. HONDA, Mr. ISRAEL, Mr. MORAN of Virginia, Mr. SHIMKUS, Mr. WAMP, Mr. HOUGHTON, Mr. HASTINGS of Washington, Ms. EDDIE BERNICE JOHNSON of Texas, Mr. NADLER, Mr. LEACH, Mr. BOYD, Mr. HINCHEY, Mr. BAIRD, Mr. ETHERIDGE, Mr. UDALL of New Mexico, Mr. FILNER, Ms. ROYBAL-ALLARD, Mrs. MCCARTHY of New York, Mr. CAPUANO, Ms. SLAUGHTER, Mr. MCDERMOTT, Mr. CALVERT, Mr. SCHIFF, Mr. DEUTSCH, Mr. WELLER, Mr. ABERCROMBIE, Mr. KENNEDY of Rhode Island, Mr. SIMPSON, Mr. HINOJOSA, Mr. RUSH, Mrs. DAVIS of California, and Mr. STUPAK) introduced the following bill; which was referred to the Committee on Science

A BILL

To authorize appropriations for fiscal years 2004, 2005, 2006, and 2007 for the Department of Energy Office of Science, to ensure that the United States is the world leader in key scientific fields by restoring a healthy balance of science funding, to ensure maximum utilization of the national user facilities, and to secure the Nation's

supply of scientists for the 21st century, 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 “Energy and Science
5 Research Investment Act of 2003”.

6 **SEC. 2. FINDINGS.**

7 Congress makes the following findings:

8 (1) The Office of Science is the largest Federal
9 sponsor of civilian research in the physical sciences
10 and plays a major role in supporting interdiscipli-
11 nary research that contributes to other scientific
12 fields, including the life sciences, mathematics, com-
13 puter science, engineering, and the environmental
14 sciences.

15 (2) The Department of Energy’s laboratories
16 have scientific capabilities that are unmatched in
17 typical academic or industrial institutions. Their sci-
18 entific teams can develop integrated approaches to
19 grand scientific challenges that are often beyond the
20 reach of individual experimenters. The Human Ge-
21 nome Project exemplifies this capability.

22 (3) The facilities at the Department of Ener-
23 gy’s laboratories are invaluable to scientists across

1 disciplines, including those from academia, industry,
2 and government.

3 (4) For more than half a century, science re-
4 search has had an extraordinary impact on the econ-
5 omy, national security, medicine, energy, life
6 sciences, and the environment. In the economic
7 arena, studies show that about half of all United
8 States post-World War II economic growth is a di-
9 rect result of technological innovation stemming
10 from scientific research.

11 (5) The Department of Energy's Office of
12 Science programs, in constant dollars, have been flat
13 funded for more than a decade, placing our scientific
14 leadership in jeopardy and limiting the generation of
15 ideas that will enhance our security and drive future
16 economic growth.

17 (6) Because the cost of doing research increases
18 at a faster rate than the Consumer Price Index, flat
19 funding for the Office of Science has led to a decline
20 in the number of grants awarded, students trained,
21 and scientists supported. Flat and erratic funding
22 has also led to an underutilization of the facilities
23 that the United States has invested hundreds of mil-
24 lions of dollars to construct.

1 (7) Higher funding levels for the Office of
2 Science will provide more opportunities for young
3 Americans to enter the fields of mathematics, engi-
4 neering, and the physical sciences, helping to allevi-
5 ate an increasing over-reliance on foreign talent in
6 these fields.

7 **TITLE I—OFFICE OF SCIENCE** 8 **AUTHORIZATION**

9 **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

10 (a) PROGRAM DIRECTION.—The Secretary of En-
11 ergy, acting through the Office of Science, shall—

12 (1) conduct a comprehensive program of funda-
13 mental research, including research on chemical
14 sciences, physics, materials sciences, biological and
15 environmental sciences, geosciences, engineering
16 sciences, plasma sciences, mathematics, and ad-
17 vanced scientific computing;

18 (2) maintain, upgrade, and expand the sci-
19 entific user facilities maintained by the Office of
20 Science and ensure that they are an integral part of
21 the departmental mission for exploring the frontiers
22 of fundamental science;

23 (3) maintain a leading-edge research capability
24 in the energy-related aspects of nanoscience and

1 nanotechnology, advanced scientific computing and
2 genome research; and

3 (4) ensure that its fundamental science pro-
4 grams, where appropriate, help inform the applied
5 research and development programs of the Depart-
6 ment.

7 (b) FISCAL YEAR 2004.—

8 (1) IN GENERAL.—There are authorized to be
9 appropriated to the Office of Science
10 \$3,624,454,000 for fiscal year 2004.

11 (2) SPECIFIC ALLOCATIONS.—The amount au-
12 thorized under paragraph (1) shall be allocated as
13 follows:

14 (A) General research activities (including
15 university programs, facilities operations, na-
16 tional laboratory programs, accelerator research
17 and development, workforce development, con-
18 struction carryovers from years prior to fiscal
19 year 2004, and program administration):
20 \$3,494,454,000.

21 (B) Initiatives consistent with interagency
22 guidance (among them nanoscience centers, ad-
23 vanced complex-simulation computing, and
24 Genomes-to-Life centers): \$80,000,000.

25 (C) New construction: \$50,000,000.

1 (c) FISCAL YEAR 2005.—

2 (1) IN GENERAL.—There are authorized to be
3 appropriated to the Office of Science
4 \$4,015,000,000 for fiscal year 2005.

5 (2) SPECIFIC ALLOCATIONS.—The amount au-
6 thORIZED under paragraph (1) shall be allocated as
7 follows:

8 (A) General research activities (including
9 university programs, facilities operations, na-
10 tional laboratory programs, accelerator research
11 and development, workforce development, con-
12 struction carryovers from years prior to fiscal
13 year 2004, and program administration):
14 \$3,820,000,000.

15 (B) Initiatives consistent with interagency
16 guidance (among them nanoscience centers, ad-
17 vanced complex-simulation computing, and
18 Genomes-to-Life centers): \$130,000,000.

19 (C) New construction: \$65,000,000.

20 (d) FISCAL YEAR 2006.—

21 (1) IN GENERAL.—There are authorized to be
22 appropriated to the Office of Science
23 \$4,618,000,000 for fiscal year 2006.

1 (2) SPECIFIC ALLOCATIONS.—The amount au-
2 thorized under paragraph (1) shall be allocated as
3 follows:

4 (A) General research activities (including
5 university programs, facilities operations, na-
6 tional laboratory programs, accelerator research
7 and development, workforce development, con-
8 struction carryovers from years prior to fiscal
9 year 2004, and program administration):
10 \$4,243,000,000.

11 (B) Initiatives consistent with interagency
12 guidance (among them nanoscience centers, ad-
13 vanced complex-simulation computing, and
14 Genomes-to-Life centers): \$205,000,000.

15 (C) New construction: \$170,000,000.

16 (e) FISCAL YEAR 2007.—

17 (1) IN GENERAL.—There are authorized to be
18 appropriated to the Office of Science
19 \$5,310,000,000 for fiscal year 2007.

20 (2) SPECIFIC ALLOCATIONS.—The amount au-
21 thorized under paragraph (1) shall be allocated as
22 follows:

23 (A) General research activities (including
24 university programs, facilities operations, na-
25 tional laboratory programs, accelerator research

1 and development, workforce development, con-
2 struction carryovers from years prior to fiscal
3 year 2004, and program administration):
4 \$4,815,000,000.

5 (B) Initiatives consistent with interagency
6 guidance (among them nanoscience centers, ad-
7 vanced complex-simulation computing, and
8 Genomes-to-Life centers): \$215,000,000.

9 (C) New construction: \$280,000,000.

10 **SEC. 102. REPORTING.**

11 Not later than 60 days after the date of enactment
12 of legislation providing for the annual appropriation of
13 funds for the Office of Science, the Director of the Office
14 of Science, henceforth referred to as the Assistant Sec-
15 retary of Science, in accordance with section 201(b) of this
16 Act, shall submit to the Committee on Science of the
17 House of Representatives and the Committee on Energy
18 and Natural Resources of the Senate a plan for the alloca-
19 tion of funds authorized by this Act for the corresponding
20 fiscal year. The plan shall include a description of how
21 the allocation of funding will—

22 (1) affect trends in research support for major
23 fields and subfields of the physical sciences, mathe-
24 matics, and engineering, including emerging multi-
25 disciplinary areas;

1 (2) affect the utilization of the Department’s
2 facilities;

3 (3) address the workforce needs by field of
4 science, mathematics, and engineering; and

5 (4) ensure that research in the physical
6 sciences, mathematics, and engineering is adequate
7 to address important research opportunities in these
8 fields.

9 **TITLE II—SCIENCE** 10 **MANAGEMENT**

11 **SEC. 201. IMPROVED COORDINATION AND MANAGEMENT** 12 **OF CIVILIAN SCIENCE AND TECHNOLOGY** 13 **PROGRAMS.**

14 (a) **EFFECTIVE TOP-LEVEL COORDINATION OF RE-**
15 **SEARCH AND DEVELOPMENT PROGRAMS.**—Section 202(b)
16 of the Department of Energy Organization Act (42 U.S.C.
17 7132(b)) is amended to read as follows:

18 “(b)(1) There shall be in the Department an Under
19 Secretary for Energy Research and Science, who shall be
20 appointed by the President, by and with the advice and
21 consent of the Senate. The Under Secretary shall be com-
22 pensated at the rate provided for at level III of the Execu-
23 tive Schedule under section 5314 of title 5, United States
24 Code.

1 “(2) The Under Secretary for Energy Research and
2 Science shall be appointed from among persons who—

3 “(A) have extensive background in scientific or
4 engineering fields; and

5 “(B) are well qualified to manage the civilian
6 research and development programs of the Depart-
7 ment of Energy.

8 “(3) The Under Secretary for Energy Research and
9 Science shall—

10 “(A) serve as the Science and Technology Advi-
11 sor to the Secretary;

12 “(B) monitor the Department’s research and
13 development programs in order to advise the Sec-
14 retary with respect to any undesirable duplication or
15 gaps in such programs;

16 “(C) advise the Secretary with respect to the
17 well-being and management of the science labora-
18 tories under the jurisdiction of the Department;

19 “(D) advise the Secretary with respect to edu-
20 cation and training activities required for effective
21 short- and long-term basic and applied research ac-
22 tivities of the Department;

23 “(E) advise the Secretary with respect to grants
24 and other forms of financial assistance required for

1 effective short- and long-term basic and applied re-
2 search activities of the Department; and

3 “(F) exercise authority and responsibility over
4 Assistant Secretaries carrying out energy research
5 and development and energy technology functions
6 under sections 203 and 209, as well as other ele-
7 ments of the Department assigned by the Sec-
8 retary.”.

9 (b) RECONFIGURATION OF POSITION OF DIRECTOR
10 OF THE OFFICE OF SCIENCE.—Section 209 of the Depart-
11 ment of Energy Organization Act (41 U.S.C. 7139) is
12 amended to read as follows:

13 “OFFICE OF SCIENCE

14 “SEC. 209. (a) There shall be within the Department
15 an Office of Science, to be headed by an Assistant Sec-
16 retary of Science, who shall be appointed by the President,
17 by and with the advice and consent of the Senate, and
18 who shall be compensated at the rate provided for level
19 IV of the Executive Schedule under section 5315 of title
20 5, United States Code.

21 “(b) The Assistant Secretary of Science shall be in
22 addition to the Assistant Secretaries provided for under
23 section 203 of this Act.

24 “(c) It shall be the duty and responsibility of the As-
25 sistant Secretary of Science to carry out the fundamental
26 science and engineering research functions of the Depart-

1 ment, including the responsibility for policy and manage-
2 ment of such research, as well as other functions vested
3 in the Secretary which he may assign to the Assistant Sec-
4 retary.”.

5 (c) ADDITIONAL ASSISTANT SECRETARY POSITION
6 TO ENABLE IMPROVED MANAGEMENT OF NUCLEAR EN-
7 ERGY ISSUES.—(1) Section 203(a) of the Department of
8 Energy Organization Act (42 U.S.C. 7133(a)) is amended
9 by striking “There shall be in the Department six Assist-
10 ant Secretaries” and inserting “Except as provided in sec-
11 tion 209, there shall be in the Department seven Assistant
12 Secretaries”.

13 (2) It is the sense of the House of Representatives
14 that the leadership for departmental missions in nuclear
15 energy should be at the Assistant Secretary level.

16 (d) TECHNICAL AND CONFORMING AMENDMENTS.—
17 (1) Section 202 of the Department of Energy Organiza-
18 tion Act (42 U.S.C. 7132) is further amended by adding
19 the following at the end:

20 “(d) There shall be in the Department an Under Sec-
21 retary, who shall be appointed by the President, by and
22 with the advice and consent of the Senate, and who shall
23 perform such functions and duties as the Secretary shall
24 prescribe, consistent with this section. The Under Sec-
25 retary shall be compensated at the rate provided for level

1 III of the Executive Schedule under section 5314 of title
2 5, United States Code.

3 “(e) There shall be in the Department a General
4 Counsel, who shall be appointed by the President, by and
5 with the advice and consent of the Senate. The General
6 Counsel shall be compensated at the rate provided for level
7 IV of the Executive Schedule under section 5315 of title
8 5, United States Code.”.

9 (2) Section 5314 of title 5, United States Code, is
10 amended by striking “Under Secretaries of Energy (2)”
11 and inserting “Under Secretaries of Energy (3)”.

12 (3) Section 5315 of title 5, United States Code, is
13 amended by—

14 (A) striking “Director, Office of Science, De-
15 partment of Energy.”; and

16 (B) striking “Assistant Secretaries of Energy
17 (6)” and inserting “Assistant Secretaries of Energy
18 (8)”.

19 (4) The table of contents for the Department of En-
20 ergy Organization Act (42 U.S.C. 7101 note) is amend-
21 ed—

22 (A) by striking “Section 209” and inserting
23 “Sec. 209”;

24 (B) by striking “213.” and inserting “Sec.
25 213.”;

1 (C) by striking “214.” and inserting “Sec.
2 214.”;

3 (D) by striking “215.” and inserting “Sec.
4 215.”; and

5 (E) by striking “216.” and inserting “Sec.
6 216.”.

7 **SEC. 202. SCIENCE ADVISORY BOARD FOR THE OFFICE OF**
8 **SCIENCE.**

9 (a) ESTABLISHMENT.—There shall be in the Office
10 of Science a Science Advisory Board, comprising the
11 chairs of the advisory panels for each of the programs.

12 (b) RESPONSIBILITIES.—The Science Advisory
13 Board shall—

14 (1) serve as the science advisor to the Assistant
15 Secretary of Science;

16 (2) advise the Assistant Secretary with respect
17 to the well-being and management of the multipur-
18 pose laboratories;

19 (3) advise the Assistant Secretary with respect
20 to education and workforce-training activities re-
21 quired for effective short- and long-term basic and
22 applied research activities of the Office of Science;
23 and

1 (4) advise the Assistant Secretary with respect
2 to the well-being of the university research programs
3 supported by the Office of Science.

○