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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

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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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Energy and Science Research Investment Act of 2003''.

SEC. 2. FINDINGS.

Congress makes the following findings:

(1) The Office of Science is the largest Federal sponsor of civilian research in the physical sciences and plays a major role in supporting interdisciplinary research that contributes to other scientific fields, including the life sciences, mathematics, computer science, engineering, and the environmental sciences.

(2) The Department of Energy's laboratories have scientific capabilities that are unmatched in typical academic or industrial institutions. Their scientific teams can develop integrated approaches to grand scientific challenges that are often beyond the reach of individual experimenters. The Human Genome Project exemplifies this capability.

(3) The facilities at the Department of Energy's laboratories are invaluable to scientists across

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

(4) For more than half a century, science research has had an extraordinary impact on the economy, national security, medicine, energy, life sciences, and the environment. In the economic arena, studies show that about half of all United States post-World War II economic growth is a direct result of technological innovation stemming from scientific research.

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

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

(7) Higher funding levels for the Office of Science will provide more opportunities for young Americans to enter the fields of mathematics, engineering, and the physical sciences, helping to alleviate an increasing over-reliance on foreign talent in these fields.

TITLE I—OFFICE OF SCIENCE AUTHORIZATION

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

(a) PROGRAM DIRECTION.—The Secretary of Energy, acting through the Office of Science, shall—

(1) conduct a comprehensive program of fundamental research, including research on chemical sciences, physics, materials sciences, biological and environmental sciences, geosciences, engineering sciences, plasma sciences, mathematics, and advanced scientific computing;

(2) maintain, upgrade, and expand the scientific user facilities maintained by the Office of Science and ensure that they are an integral part of the departmental mission for exploring the frontiers of fundamental science;

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

nanotechnology, advanced scientific computing and genome research; and

(4) ensure that its fundamental science programs, where appropriate, help inform the applied research and development programs of the Department.

(b) FISCAL YEAR 2004.—

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

(2) SPECIFIC ALLOCATIONS.—The amount authorized under paragraph (1) shall be allocated as follows:

(A) General research activities (including university programs, facilities operations, national laboratory programs, accelerator research and development, workforce development, construction carryovers from years prior to fiscal year 2004, and program administration): $3,494,454,000.

(B) Initiatives consistent with interagency guidance (among them nanoscience centers, advanced complex-simulation computing, and Genomes-to-Life centers): $80,000,000.

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

(c) FISCAL YEAR 2005.—

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

(2) SPECIFIC ALLOCATIONS.—The amount authorized under paragraph (1) shall be allocated as follows:

(A) General research activities (including university programs, facilities operations, national laboratory programs, accelerator research and development, workforce development, construction carryovers from years prior to fiscal year 2004, and program administration): $3,820,000,000.

(B) Initiatives consistent with interagency guidance (among them nanoscience centers, advanced complex-simulation computing, and Genomes-to-Life centers): $130,000,000.

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

(d) FISCAL YEAR 2006.—

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

(2) SPECIFIC ALLOCATIONS.—The amount authorized under paragraph (1) shall be allocated as follows:

(A) General research activities (including university programs, facilities operations, national laboratory programs, accelerator research and development, workforce development, construction carryovers from years prior to fiscal year 2004, and program administration): $4,243,000,000.

(B) Initiatives consistent with interagency guidance (among them nanoscience centers, advanced complex-simulation computing, and Genomes-to-Life centers): $205,000,000.

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

(e) FISCAL YEAR 2007.—

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

(2) SPECIFIC ALLOCATIONS.—The amount authorized under paragraph (1) shall be allocated as follows:

(A) General research activities (including university programs, facilities operations, national laboratory programs, accelerator research

and development, workforce development, construction carryovers from years prior to fiscal year 2004, and program administration): $4,815,000,000.

(B) Initiatives consistent with interagency guidance (among them nanoscience centers, advanced complex-simulation computing, and Genomes-to-Life centers): $215,000,000.

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

SEC. 102. REPORTING.

Not later than 60 days after the date of enactment of legislation providing for the annual appropriation of funds for the Office of Science, the Director of the Office of Science, henceforth referred to as the Assistant Secretary of Science, in accordance with section 201(b) of this Act, shall submit to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a plan for the allocation of funds authorized by this Act for the corresponding fiscal year. The plan shall include a description of how the allocation of funding will—

(1) affect trends in research support for major fields and subfields of the physical sciences, mathematics, and engineering, including emerging multidisciplinary areas;

(2) affect the utilization of the Department's facilities;

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

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

TITLE II—SCIENCE MANAGEMENT

SEC. 201. IMPROVED COORDINATION AND MANAGEMENT OF CIVILIAN SCIENCE AND TECHNOLOGY PROGRAMS.

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

''(b)(1) There shall be in the Department an Under Secretary for Energy Research and Science, who shall be appointed by the President, by and with the advice and consent of the Senate. The Under Secretary shall be compensated at the rate provided for at level III of the Executive Schedule under section 5314 of title 5, United States Code.

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

''(A) have extensive background in scientific or engineering fields; and

''(B) are well qualified to manage the civilian research and development programs of the Department of Energy.

''(3) The Under Secretary for Energy Research and Science shall—

''(A) serve as the Science and Technology Advisor to the Secretary;

''(B) monitor the Department's research and development programs in order to advise the Secretary with respect to any undesirable duplication or gaps in such programs;

''(C) advise the Secretary with respect to the well-being and management of the science laboratories under the jurisdiction of the Department;

''(D) advise the Secretary with respect to education and training activities required for effective short- and long-term basic and applied research activities of the Department;

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

effective short- and long-term basic and applied research activities of the Department; and

''(F) exercise authority and responsibility over Assistant Secretaries carrying out energy research and development and energy technology functions under sections 203 and 209, as well as other elements of the Department assigned by the Secretary.''.

(b) RECONFIGURATION OF POSITION OF DIRECTOR OF THE OFFICE OF SCIENCE.—Section 209 of the Department of Energy Organization Act (41 U.S.C. 7139) is amended to read as follows:

''OFFICE OF SCIENCE

''SEC. 209. (a) There shall be within the Department an Office of Science, to be headed by an Assistant Secretary of Science, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level IV of the Executive Schedule under section 5315 of title 5, United States Code.

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

''(c) It shall be the duty and responsibility of the Assistant Secretary of Science to carry out the fundamental science and engineering research functions of the Depart-

ment, including the responsibility for policy and management of such research, as well as other functions vested in the Secretary which he may assign to the Assistant Secretary.''.

(c) ADDITIONAL ASSISTANT SECRETARY POSITION TO ENABLE IMPROVED MANAGEMENT OF NUCLEAR ENERGY ISSUES.—(1) Section 203(a) of the Department of Energy Organization Act (42 U.S.C. 7133(a)) is amended by striking ''There shall be in the Department six Assistant Secretaries'' and inserting ''Except as provided in section 209, there shall be in the Department seven Assistant Secretaries''.

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

(d) TECHNICAL AND CONFORMING AMENDMENTS.—(1) Section 202 of the Department of Energy Organization Act (42 U.S.C. 7132) is further amended by adding the following at the end:

''(d) There shall be in the Department an Under Secretary, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall perform such functions and duties as the Secretary shall prescribe, consistent with this section. The Under Secretary shall be compensated at the rate provided for level

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

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

(2) Section 5314 of title 5, United States Code, is amended by striking ''Under Secretaries of Energy (2)'' and inserting ''Under Secretaries of Energy (3)''.

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

(A) striking ''Director, Office of Science, Department of Energy.''; and

(B) striking ''Assistant Secretaries of Energy (6)'' and inserting ''Assistant Secretaries of Energy (8)''.

(4) The table of contents for the Department of Energy Organization Act (42 U.S.C. 7101 note) is amended—

(A) by striking ''Section 209'' and inserting ''Sec. 209'';

(B) by striking ''213.'' and inserting ''Sec. 213.'';

(C) by striking ''214.'' and inserting ''Sec. 214.'';

(D) by striking ''215.'' and inserting ''Sec. 215.''; and

(E) by striking ''216.'' and inserting ''Sec. 216.''.

SEC. 202. SCIENCE ADVISORY BOARD FOR THE OFFICE OF SCIENCE.

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

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

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

(2) advise the Assistant Secretary with respect to the well-being and management of the multipurpose laboratories;

(3) advise the Assistant Secretary with respect to education and workforce-training activities required for effective short- and long-term basic and applied research activities of the Office of Science; and

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

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