

## Legislative Bulletin.....July 7, 2004

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### Summary of the Bills Under Consideration Today:

**Total Number of New Government Programs:** 2 new programs

**Total Cost of Discretionary Authorizations:** At least \$791.4 million over five years

**Total Amount of Revenue Reductions:** \$0

**Total Change in Mandatory Spending:** \$0

**Total New State & Local Government Mandates:** 0

**Total New Private Sector Mandates:** 0

### H.R. 4218—High-Performance Computing Revitalization Act (Biggert)

**Order of Business:** The bill is scheduled to be considered on Wednesday, July 7<sup>th</sup>, under a motion to suspend the rules and pass the bill.

**Summary:** H.R. 4218 would amend the High-Performance Computing Act of 1991 (Public Law 102-194), the bill that set the federal government's interagency research and development strategy for supercomputers, as follows:

- Updates the authorized activities of the High-Performance Computing Research and Development Program to account for changes in technology;
- Increases the interagency coordination responsibilities of the Director of the Office of Science and Technology Policy (OSTP) to include more future-oriented work and analysis;

- Requires that the OSTP Director establish goals and priorities for federal high-performance computing research, development, networking, and other such activities;
- Directs the OSTP Director to develop and maintain a research, development, and deployment “roadmap” for the provision of high-performance computing systems for use by the research community in the United States;
- Requires that the President's Information Technology Advisory Committee conduct periodic evaluations of the funding, management, coordination, implementation, and activities of the Program, and report its findings to Congress; and
- Spells out specific responsibilities under the Program for the National Science Foundation, the Energy Department, NASA, the National Institute of Standards and Technology, the National Oceanic and Atmospheric Administration, and the EPA.

**Additional Background:** CBO reports that about \$1.6 billion was appropriated in FY2004 for non-defense research and development on high-performance computing across six federal agencies.

High-performance computers are defined to include supercomputer systems; high-capacity and high-speed networks; special purpose and experimental systems, applications, and systems software; and the management of large data sets.

The High-Performance Computing Act of 1991 (Public Law 102-194) was a project of then-Senator Al Gore, Jr.

**Committee Action:** On April 27, 2004, H.R. 4218 was referred to the Science Committee, which held hearings on the bill on May 13<sup>th</sup> and marked it up on June 16<sup>th</sup>. At the end of the mark-up session, the Committee by voice vote ordered the bill reported to the full House.

**Administration Position:** On May 13, 2004, before the House Science Committee, Dr. John Marburger, Director of the Office of Science and Technology Policy (OSTP), endorsed H.R. 4218 on behalf of the Administration.

**Cost to Taxpayers:** CBO estimates that the bill would authorize \$35 million in FY2005 and \$275 million over the FY2005-FY2009 period.

**Does the Bill Expand the Size and Scope of the Federal Government?:** Only in the sense that the bill would require the Energy Department and the National Science Foundation to provide researchers with “sustained access to high-performance computing systems that are among the most advanced in the world in terms of performance in solving scientific and engineering problems.”

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Constitutional Authority:** The Science Committee, in House Report 108-580, cites constitutional authority in Article I, Section 8, yet fails to cite a specific clause. Clause 3 of House Rule XIII, Section d(1), requires that all committee reports contain “a statement citing

the *specific* powers granted to Congress in the Constitution to enact the law proposed by the bill or joint resolution.” [emphasis added]

**RSC Staff Contact:** Paul S. Teller, [paul.teller@mail.house.gov](mailto:paul.teller@mail.house.gov), (202) 226-9718

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## **H.R. 4516—Department of Energy High-End Computing Revitalization Act (Biggert)**

**Order of Business:** The bill is scheduled to be considered on Wednesday, July 7<sup>th</sup>, under a motion to suspend the rules and pass the bill.

**Summary:** H.R. 4516 would direct the Secretary of Energy, acting through the Department’s Office of Science, to carry out a program of research and development (involving software and hardware) to advance high-end computing systems and to develop and deploy such systems for advanced scientific and engineering applications. Among other things, the program would have to allow for “sustained access” to the research community in the U.S. and for technology transfers to the private sector. The high-end computing systems to be deployed, known in the bill as “Leadership Systems,” would have to be systems that are “among the most advanced in the world in terms of performance in solving scientific and engineering problems.” The Secretary would have to provide access to Leadership Systems on a “competitive, merit-reviewed basis” to researchers from U.S. private industry, institutions of higher education, national laboratories, and other federal agencies.

H.R. 4516 would authorize appropriations for this new program, as follows:

FY2005: \$50 million

FY2006: \$55 million

FY2007: \$60 million

**Committee Action:** On June 4, 2004, H.R. 4218 was referred to the Science Committee and on June 7<sup>th</sup> was referred to the Subcommittee on Energy. On June 15<sup>th</sup>, the Subcommittee marked up and forwarded the bill by voice vote to the full Committee. On June 16<sup>th</sup>, the Committee marked up, amended, and by voice vote ordered the bill reported to the full House.

The Committee agreed to an amendment by Rep. Biggert, removing the “findings” section of the bill. One such finding was, “without government support, market forces are unlikely to drive sufficient innovation in high-end computing because the private sector would not capture the full value of its innovations on a short enough time frame.”

**Administration Position:** On May 13, 2004, before the House Science Committee, Dr. John Marburger, Director of the Office of Science and Technology Policy (OSTP), endorsed H.R. 4516 on behalf of the Administration.

**Cost to Taxpayers:** CBO confirms that the bill would authorize \$50 million in FY2005 and \$165 million over the FY2005-FY2007 period.

**Does the Bill Expand the Size and Scope of the Federal Government?:** Yes, since it would create one new federal program.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Constitutional Authority:** The Science Committee, in House Report 108-578, cites constitutional authority in Article I, Section 8, yet fails to cite a specific clause. Clause 3 of House Rule XIII, Section d(1), requires that all committee reports contain “a statement citing the *specific* powers granted to Congress in the Constitution to enact the law proposed by the bill or joint resolution.” *[emphasis added]*

**RSC Staff Contact:** Paul S. Teller, [paul.teller@mail.house.gov](mailto:paul.teller@mail.house.gov), (202) 226-9718

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## **H.R. 3890—To reauthorize the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988 (Hart)**

**Order of Business:** The bill is scheduled for consideration on Wednesday, July 7<sup>th</sup>, under a motion to suspend the rules and pass the bill.

**Summary:** H.R. 3890 reauthorizes the Steel and Aluminum Energy Conservation and Technology Competitiveness Act of 1988 (which supports energy efficiency research and development at the Department of Energy to support the domestic metals industry). The bill authorizes the same amount for FY05 as was appropriated for FY04 (\$13.268 million) and authorizes \$20 million for each of fiscal years 2006-2009. The bill also requires the Department of Energy to update its management plan and transmit it to Congress and adds as a program priority “the development of technologies which reduce greenhouse gas emissions.”

Authorization for the programs under the Act expired in 1997, but the programs have continued to be funded.

**Committee Action:** H.R. 3890 was introduced on March 4, 2004, and referred to the Committee on Science. The Subcommittee on Energy reported the bill on June 15, 2004, by voice vote and the full Science Committee favorably reported the bill by voice vote on June 16, 2004.

**Cost to Taxpayers:** According to the Congressional Budget Office, H.R. 3890 would cost \$79 million over the 2005-2009 period, subject to appropriations.

**Does the Bill Expand the Size and Scope of the Federal Government?:** No.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Constitutional Authority:** The Science Committee, in House Report 108-579, cites Article I, Section 8, but fails to cite a specific clause.

**Staff Contact:** Lisa Bos, [lisa.bos@mail.house.gov](mailto:lisa.bos@mail.house.gov), (202) 226-1630

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## **H.R. 3980— National Windstorm Impact Reduction Act of 2004 (Neugebauer)**

**Order of Business:** The bill is scheduled for consideration on Wednesday, July 7<sup>th</sup>, under a motion to suspend the rules and pass the bill.

**Summary:** H.R. 3980 establishes the National Windstorm Impact Reduction Program, with the objective of achieving major measurable reductions in losses of life and property from windstorms through a coordinated federal effort. The three primary components of the program would be improved understanding of windstorms, windstorm impact assessment, and windstorm impact reduction.

The Directory of the Office of Science and Technology Policy (in the Executive Office of the President) would be required to establish an Interagency Working Group on windstorms that includes representatives of the National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), the National Oceanic and Atmospheric Administration (NOAA), and the National Institutes of Science and Technology (NIST). The bill specifies the general responsibilities of each agency. The working group must develop a plan for achieving the objectives of the program no later than 12 months after the date of enactment.

The bill also establishes a National Advisory Committee on Windstorm Impact Reduction to review progress made under the program, advise on improvements, and report to Congress on actions taken to limit vulnerability to windstorms.

Authorizes the following appropriations:

- FEMA: \$8 million for FY05, \$8.7 million for FY06, and \$9.4 million for FY07
- NSF: \$8 million for FY05, \$8.7 for FY06, and \$9.4 million for FY07
- NIST: \$2 million for FY05, \$3 million for FY06, and \$4 million for FY07
- NOAA: \$2 million for FY05, \$2.1 million for FY06, \$2.2 million for FY07

**Committee Action:** H.R. 3980 was introduced on March 17, 2004, and referred to the Committee on Science. The committee reported the bill by voice vote on March 31, 2004.

**Cost to Taxpayers:** According to the Congressional Budget Office H.R. 3980 would cost \$67 million over the 2005-2009 period, subject to appropriations.

**Does the Bill Expand the Size and Scope of the Federal Government?:** Yes, the bill establishes a new program.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Constitutional Authority:** The Science Committee, in House Report 108-575, cites Article I, Section 8, but fails to cite a specific clause.

**Staff Contact:** Lisa Bos, [lisa.bos@mail.house.gov](mailto:lisa.bos@mail.house.gov), (202) 226-1630

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**H.R. 1856—Harmful Algal Bloom and Hypoxia Research Amendments Act of 2003 (Ehlers)**

**Order of Business:** The bill is scheduled for consideration on Wednesday, July 7<sup>th</sup>, under a motion to suspend the rules and pass the bill.

**Summary:** H.R. 1856 reauthorizes the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 for fiscal years 2004-2006. The programs under the Act are administered by the National Oceanic and Atmospheric Administration (NOAA).

Specifically, the bill:

- Continues the Interagency Task Force on Harmful Algal Blooms and Hypoxia (would be disestablished under current law when certain reports are submitted) and requires the task force to conduct a national assessment of harmful algal blooms every five years. Requires a one-time freshwater assessment (freshwater would then be incorporated in the national assessment). Requires national hypoxia scientific assessments every five years. Requires local and regional assessment of algal blooms and hypoxia if requested by a state or local government.
- Requires the development of a “prediction and response plan” to review algal bloom prediction techniques and identify innovative measures to prevent and control algal blooms.
- Contains the following authorization levels:
  - \$3 million for each of fiscal years 2004-06 for research and assessment activities at National Ocean Service Laboratories (up from \$2 million authorized for FY01);
  - \$10.2 million for each of fiscal years 2004-06 for the Ecology and Oceanography of Harmful Algal Blooms project (up from \$5.5 million authorized for FY01), with a \$2 million set-aside to research on freshwater harmful algal blooms;
  - \$2 million for FY04 and \$3 million for FY05 and FY06 for research on algal bloom prevention, control, and mitigation (\$2 million authorized for FY01);
  - \$6 million for the Monitoring and Event Response for Harmful Algal Blooms program (up from \$5.5 million authorized for FY01);
  - \$5 million for FY04, \$5.5 million for FY05, and \$6 million for FY06 for research and monitoring on hypoxia (up from \$4 million authorized for FY01); and

- \$3 million for each of fiscal years 2004-06 for local and regional assessments (new authorization).
- Alters the mission of the Coastal Ocean Science program to support Great Lakes, estuarine, and coastal ocean research. Requires research programs to be competitive, peer-reviewed, and merit-based. Authorizes \$34 million for FY04, \$36 million for FY05, and \$38 million for FY06 (this program received \$14.9 million in FY04 and the Administration has requested \$8.7 million for FY05).

**Additional Background:** Algal blooms are unusual concentrations of algae that produce toxins that are implicated in fish kills and are considered a possible threat to public health. Algal blooms can lead to hypoxia, which occurs when an algal bloom dies and decomposes, reducing oxygen in the water to levels that are harmful to aquatic life.

**Committee Action:** H.R. 1856 was introduced on April 29, 2003, and referred to the Committee on Science and the Committee on Resources. The Subcommittee on Environment, Technology, and Standards of the Committee on Science approved the bill by voice vote on June 5, 2003, and the full committee reported the bill by voice vote on July 22, 2003. The Committee on Resources discharged the bill without consideration.

**Cost to Taxpayers:** According to the Congressional Budget Office, H.R. 1856 would cost \$193 million over the 2004-2008 period, subject to appropriations.

**Does the Bill Expand the Size and Scope of the Federal Government?:** Yes, the bill requires NOAA to conduct local and regional algal bloom assessments and authorizes new funding for that purpose.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Constitutional Authority:** The Science Committee, in House Report 108-326, cites Article I, Section 8, but fails to cite a specific clause.

**Staff Contact:** Lisa Bos, [lisa.bos@mail.house.gov](mailto:lisa.bos@mail.house.gov), (202) 226-1630

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## **H.Con.Res. 301—Supporting the goals and ideals of the World Year of Physics (Ehlers)**

**Order of Business:** The resolution is scheduled for consideration on Wednesday, July 7<sup>th</sup>, under a motion to suspend the rules and pass the bill.

**Summary:** H.Con.Res. 301 resolves that Congress:  
“(1) supports the goals and ideals of the World Year of Physics, as designated by the General Assembly of the International Union of Pure and Applied Physics;

“(2) encourages the American people to observe the World Year of Physics as a special occasion for giving impetus to education and research in physics as well as to the public's understanding of physics;

“(3) encourages all science-related government agencies and nongovernmental organizations, the private sector, and the media to highlight and give enhanced recognition to the role of physics in social, cultural, and economic development as well as its positive impact and contributions to society; and

“(4) encourages all those involved in physics education and research to take additional steps, including strengthening existing and emerging fields of physics research and promoting the public's understanding of physics, to ensure that support for physics continues and that physics studies at all levels continue to attract an adequate number of students.”

**Additional Background:** The General Assembly of the International Union of Pure and Applied Physics designated 2005 as the World Year of Physics.

**Committee Action:** The resolution was introduced on October 15, 2003, and referred to the Committee on Science. The committee did not consider the resolution.

**Cost to Taxpayers:** The resolution does not authorize any expenditure.

**Does the Bill Expand the Size and Scope of the Federal Government?:** No.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?:** No.

**Constitutional Authority:** A committee report citing constitutional authority is not available.

**Staff Contact:** Lisa Bos, [lisa.bos@mail.house.gov](mailto:lisa.bos@mail.house.gov), (202) 226-1630