

may have 5 legislative days within which to revise and extend their remarks on H.R. 3204, the measure just passed and to insert extraneous material therein.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Delaware?

There was no objection.

#### ANNOUNCEMENT BY THE SPEAKER PRO TEMPORE

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, the Chair will postpone further proceedings today on motions to suspend the rules on which a recorded vote or the yeas and nays are ordered, or on which the vote is objected to under clause 6 of rule XX.

RECORD votes on postponed questions will be taken tomorrow.

#### DEPARTMENT OF ENERGY HIGH-END COMPUTING REVITALIZATION ACT OF 2004

Mrs. BIGGERT. Mr. Speaker, I move to suspend the rules and concur in the Senate amendment to the bill (H.R. 4516) to require the Secretary of Energy to carry out a program of research and development to advance high-end computing.

The Clerk read as follows:

Senate amendment:

Strike out all after the enacting clause and insert:

#### SECTION 1. SHORT TITLE.

This Act may be cited as the "Department of Energy High-End Computing Revitalization Act of 2004".

#### SEC. 2. DEFINITIONS.

In this Act:

(1) CENTER.—The term "Center" means a High-End Software Development Center established under section 3(d).

(2) HIGH-END COMPUTING SYSTEM.—The term "high-end computing system" means a computing system with performance that substantially exceeds that of systems that are commonly available for advanced scientific and engineering applications.

(3) LEADERSHIP SYSTEM.—The term "Leadership System" means a high-end computing system that is among the most advanced in the world in terms of performance in solving scientific and engineering problems.

(4) INSTITUTION OF HIGHER EDUCATION.—The term "institution of higher education" has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(5) SECRETARY.—The term "Secretary" means the Secretary of Energy, acting through the Director of the Office of Science of the Department of Energy.

#### SEC. 3. DEPARTMENT OF ENERGY HIGH-END COMPUTING RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—The Secretary shall—

(1) carry out a program of research and development (including development of software and hardware) to advance high-end computing systems; and

(2) develop and deploy high-end computing systems for advanced scientific and engineering applications.

(b) PROGRAM.—The program shall—

(1) support both individual investigators and multidisciplinary teams of investigators;

(2) conduct research in multiple architectures, which may include vector, reconfigurable logic, streaming, processor-in-memory, and multi-threading architectures;

(3) conduct research on software for high-end computing systems, including research on algorithms, programming environments, tools, languages, and operating systems for high-end computing systems, in collaboration with architecture development efforts;

(4) provide for sustained access by the research community in the United States to high-end computing systems and to Leadership Systems, including provision of technical support for users of such systems;

(5) support technology transfer to the private sector and others in accordance with applicable law; and

(6) ensure that the high-end computing activities of the Department of Energy are coordinated with relevant activities in industry and with other Federal agencies, including the National Science Foundation, the Defense Advanced Research Projects Agency, the National Nuclear Security Administration, the National Security Agency, the National Institutes of Health, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, the National Institutes of Standards and Technology, and the Environmental Protection Agency.

(c) LEADERSHIP SYSTEMS FACILITIES.—

(1) IN GENERAL.—As part of the program carried out under this Act, the Secretary shall establish and operate 1 or more Leadership Systems facilities to—

(A) conduct advanced scientific and engineering research and development using Leadership Systems; and

(B) develop potential advancements in high-end computing system hardware and software.

(2) ADMINISTRATION.—In carrying out this subsection, the Secretary shall provide to Leadership Systems, on a competitive, merit-reviewed basis, access to researchers in United States industry, institutions of higher education, national laboratories, and other Federal agencies.

(d) HIGH-END SOFTWARE DEVELOPMENT CENTER.—

(1) IN GENERAL.—As part of the program carried out under this Act, the Secretary shall establish at least 1 High-End Software Development Center.

(2) DUTIES.—A Center shall concentrate efforts to develop, test, maintain, and support optimal algorithms, programming environments, tools, languages, and operating systems for high-end computing systems.

(3) PROPOSALS.—In soliciting proposals for the Center, the Secretary shall encourage staffing arrangements that include both permanent staff and a rotating staff of researchers from other institutions and industry to assist in coordination of research efforts and promote technology transfer to the private sector.

(4) USE OF EXPERTISE.—The Secretary shall use the expertise of a Center to assess research and development in high-end computing system architecture.

(5) SELECTION.—The selection of a Center shall be determined by a competitive proposal process administered by the Secretary.

#### SEC. 4. AUTHORIZATION OF APPROPRIATIONS.

In addition to amounts otherwise made available for high-end computing, there are authorized to be appropriated to the Secretary to carry out this Act—

(1) \$50,000,000 for fiscal year 2005;

(2) \$55,000,000 for fiscal year 2006; and

(3) \$60,000,000 for fiscal year 2007.

#### SEC. 5. ASTRONOMY AND ASTROPHYSICS ADVISORY COMMITTEE.

(a) AMENDMENTS.—Section 23 of the National Science Foundation Authorization Act of 2002 (42 U.S.C. 1862n-9) is amended—

(1) in subsection (a) and paragraphs (1) and (2) of subsection (b), by striking "and the Na-

tional Aeronautics and Space Administration" and inserting "the National Aeronautics and Space Administration, and the Department of Energy";

(2) in subsection (b)(3), by striking "Administration, and" and inserting "Administration, the Secretary of Energy, ";

(3) in subsection (c)—

(A) in paragraphs (1) and (2), by striking "5" and inserting "4";

(B) in paragraph (2), by striking "and" at the end;

(C) by redesignating paragraph (3) as paragraph (4), and in that paragraph by striking "3" and inserting "2"; and

(D) by inserting after paragraph (2) the following:

"(3) 3 members selected by the Secretary of Energy; and

(4) in subsection (f), by striking "the advisory bodies of other Federal agencies, such as the Department of Energy, which may engage in related research activities" and inserting "other Federal advisory committees that advise Federal agencies that engage in related research activities".

(b) EFFECTIVE DATE.—The amendments made by subsection (a) take effect on March 15, 2005.

#### SEC. 6. REMOVAL OF SUNSET PROVISION FROM SAVINGS IN CONSTRUCTION ACT OF 1996.

Section 14 of the Metric Conversion Act of 1975 (15 U.S.C. 205l) is amended by striking subsection (e).

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Illinois (Mrs. BIGGERT) and the gentleman from Tennessee (Mr. DAVIS) each will control 20 minutes.

The Chair recognizes the gentlewoman from Illinois (Mrs. BIGGERT).

GENERAL LEAVE

Mrs. BIGGERT. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on the Senate amendment to H.R. 4516, the bill now under consideration.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Illinois?

There was no objection.

Mrs. BIGGERT. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, when we think of how computers affect our lives, we probably think of the work we do on our office desktop machines, or maybe the Internet surfing we do in our spare time. We do not normally think of the enormous contribution that supercomputers, also called high-performance computers, make to the world around us.

These powerful machines are used in the development of pharmaceuticals, in modeling the earth's climate, and in applications critical to ensuring our national and homeland security and our economic competitiveness. High-performance computers also are central to maintaining U.S. leadership in many scientific fields. Computational science complements theory and experimentation in fields such as plasma physics and fusion, astrophysics, nuclear physics and genomics.

The bill currently under consideration, H.R. 4516, spells out in detail the research and development the Department of Energy should be doing to help

ensure that America remains a leader in the development and use of supercomputers. More specifically, H.R. 4516 does three things.

First, it requires the Secretary of Energy to establish and operate high-end computing facilities involving leadership-class machines that are among the most elite in the world.

Second, this bill directs the Secretary to conduct advanced scientific and engineering research and development using these leadership class systems, and to continue to advance the capabilities of high-end computing hardware and software.

Finally, the bill requires that these computing facilities be made available on a competitive, peer-reviewed basis to researchers from U.S. industry, institutions of higher learning, national laboratories and other Federal agencies.

Mr. Speaker, dramatic scientific and commercial breakthroughs will require us to increase computing power by a factor of 100 or, in some cases, by a factor of 1,000. While attaining these increases may seem daunting, the history of computer development has taught us that, with a sustained commitment to research, such gains are within our reach.

That is why Energy Secretary Abraham announced last summer the selection of a team, including Argonne National Laboratory, Oak Ridge National Laboratory, IBM, Cray and other partners, to develop and build a new, high-end computing facility.

H.R. 4516 complements and supports this DOE initiative and ensures that the department can fulfill its responsibility to help lead the Federal Government's supercomputing R&D efforts.

The Senate passed this bill by unanimous consent last month, and in July the House passed a similar version by voice vote. I urge my colleagues to support this legislation again and send it to the President's desk so that the United States can maintain its distinction as home to the world's most powerful computer.

Mr. Speaker, I reserve the balance of my time.

Mr. DAVIS of Tennessee. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of H.R. 4516, the Department of Energy High-End Computing Revitalization Act of 2004.

I had the pleasure of working on this legislation with my esteemed colleague across the aisle, the gentlewoman from Illinois (Mrs. BIGGERT), who does an excellent job on the Committee on Science, and I look forward to having more opportunities to work with her on other important policy goals that we are able to impact at the Committee on Science.

The bill authorizes research and development activities at the Department of Energy to provide for the design, the development and the deployment of powerful computing systems,

including both hardware and software. It will lead to the development of the computational tools needed for solving the most demanding science and engineering problems. The activities authorized will constitute part of the ongoing interagency information technology research and development program established by the High-Performance Computing Act of 1991.

H.R. 4516 will build on the demonstrated expertise of the Department of Energy in advancing the technology needed for designing and building the most powerful scientific computing systems in the world.

Equally important, the bill provides for the development and deployment of leadership-class computing systems, such as the system recently announced for installation at the Oak Ridge National Laboratory, which will provide access on a competitive basis for the research community in the United States.

The effect of the bill will be to put into the hands of researchers the tools they need to attack the most challenging problems in science and engineering, as well as to accelerate the development of the computing tools needed to underpin industrial competitiveness and our national defense.

Finally, H.R. 4516 will help to implement the Federal plan for high-end computing that was released earlier this year by the Office of Science and Technology Policy.

Mr. Speaker, I commend this legislative measure to my colleagues and recommend its passage by the House, as amended by the other body.

Mr. Speaker, I yield back the balance of my time.

Mrs. BIGGERT. Mr. Speaker, I yield myself such time as I may consume.

I want to conclude this debate by recognizing the bill's cosponsors, the gentleman from Tennessee (Mr. DAVIS) and the gentleman from Tennessee (Mr. GORDON), and thank them for their efforts in support of this legislation.

I also would like to thank the gentleman from New York (Mr. BOEHLERT) for holding a Science Committee hearing last May to review our Federal investment in high-end computing. The hearing was a success. We received positive feedback on this legislation from a number of experts on high-performance computing who testified before the committee.

I also would like to acknowledge the U.S. supercomputing industry for its impressive accomplishments. I congratulate IBM for its new Blue Gene/L supercomputer, which was recognized just last week as the fastest computer in the world. The Blue Gene/L is faster than Japan's Earth Simulator, which held the world record in computing speed for nearly 3 years. With passage of this bill, the DOE can work closely with IBM and other industry leaders like Cray and Silicon Graphics Incorporated as well as academia to ensure that the United States continues to be home to the world's fastest supercomputer for years to come.

Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from Illinois (Mrs. BIGGERT) that the House suspend the rules and concur in the Senate amendment to the bill, H.R. 4516.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the Senate amendment was concurred in.

A motion to reconsider was laid on the table.

#### AMENDING LIVESTOCK MANDATORY PRICE REPORTING ACT OF 1999

Mr. GOODLATTE. Mr. Speaker, I move to suspend the rules and pass the Senate bill (S. 2965) to amend the Livestock Mandatory Price Reporting Act of 1999 to modify the termination date for mandatory price reporting.

The Clerk read as follows:

S. 2965

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

#### SECTION 1. EXTENSION.

Section 942 of the Livestock Mandatory Price Reporting Act of 1999 (7 U.S.C. 1635 note; Public Law 106-78) is amended by striking "terminate" and all that follows and inserting "terminate on September 30, 2005."

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Virginia (Mr. GOODLATTE) and the gentleman from Arkansas (Mr. ROSS) each will control 20 minutes.

The Chair recognizes the gentleman from Virginia (Mr. GOODLATTE).

Mr. GOODLATTE. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in support of this legislation, which extends an important program until September 30, 2005.

As many of my colleagues know, authorization for the U.S. Department of Agriculture's Mandatory Price Reporting Program, which was passed in the 1999 agriculture appropriation, expired on October 23. This program requires USDA to operate a mandatory price reporting system for beef, pork and lamb, which provides useful information for everyone engaged in the buying and selling of these products.

In the absence of authority to enforce mandatory reporting, the USDA has contacted the companies to encourage them to continue reporting data during the gap in program authorization. It is my understanding that everyone has been cooperating. This is because they recognize the important role this data plays in price discovery and in the operation of marketing agreements.

There is also a clear agreement that the current program should be extended for an additional year to provide livestock producers, the packer community and other interested parties additional time to identify and agree upon these technical improvements to the law.