and I yield back the balance of my time.

The SPEAKER pro tempore (Mr. WOODALL). The question is on the motion offered by the gentleman from Texas (Mr. SMITH) that the House suspend the rules and pass the bill, H.R. 6227, as amended.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

## DEPARTMENT OF ENERGY RESEARCH AND INNOVATION ACT

Mr. SMITH of Texas. Mr. Speaker, I move to suspend the rules and concur in the Senate amendment to the bill (H.R. 589) to establish Department of Energy policy for science and energy research and development programs, and reform National Laboratory management and technology transfer programs, and for other purposes.

The Clerk read the title of the bill.

The text of the Senate amendment is as follows:

Senate amendment:

Strike title IV.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Texas (Mr. SMITH) and the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) each will control 20 minutes.

The Chair recognizes the gentleman from Texas.

GENERAL LEAVE

Mr. SMITH of Texas. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and to include extraneous materials on H.R. 589, the bill now under consideration.

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

There was no objection.

Mr. SMITH of Texas. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, H.R. 589, the Department of Energy Research and Innovation Act, is the product of more than 4 years of work by the Science Committee to advance basic research in science and technology and set clear science priorities for the Department of Energy.

Mr. Speaker, I want to thank my colleagues on the Science Committee who have sponsored this legislation with me, particularly Ranking Member EDDIE BERNICE JOHNSON, Vice Chairman FRANK LUCAS, Energy Subcommittee Chairman RANDY WEBER, Energy Subcommittee Vice Chairman STEVE KNIGHT, and Energy Subcommittee members DANA ROHRABACHER, MO BROOKS, NEAL DUNN, RANDY HULTGREN, MARC VEASEY, ZOE LOFGREN, DAN LIPINSKI, and PAUL TONKO, as well as full committee members BARBARA COMSTOCK, BRIAN BABIN, ANDY BIGGS, CLAY HIGGINS, ELIZABETH ESTY, and ED PERLMUTTER.

Six standalone Science Committee energy research bills from last Congress are included in this legislation.

The DOE Research and Innovation Act prioritizes critical basic research and science at the DOE national labs. It provides the first comprehensive authorization for Office of Science programs, which conduct and support more than $6 billion in research each year.

This legislation also requires DOE to coordinate research across the Department. It provides private industry with increased access to the unique user facilities and capabilities of the national labs that will help to develop advanced technologies for the next generation.

Title I of H.R. 589 improves the technology transfer process between DOE and private industry.

The innovative early stage research performed at the national labs can have great value to the private sector. While the labs consistently develop ideas and technology that have commercial potential, Federal red tape and bureaucracy discourage the cooperation needed for the private sector to take technologies to market.

Title I enables national lab directors to better partner with industry and ensure that the United States can remain a world leader in science and technology.

Mr. Speaker, I thank the gentleman from Illinois, Representative RANDY HULTGREN, and the gentleman from Colorado, Representative ED PERLMUTTER, for their initiative on this issue and for sponsoring similar legislation in the last Congress to advance these important reforms at our national labs.

Title II of the legislation requires DOE to better manage and coordinate research efforts at the Department of Energy.

This title also requires DOE to provide a regular analysis of science and technology activities within the Department. This will identify key areas for collaboration across science and applied research programs, and allow the Secretary to identify programs that cost too much and could be better undertaken by the private sector.

Title III establishes priorities and provides statutory direction for the basic research programs within the DOE's Office of Science. This includes research and basic energy sciences, biological and environmental research, high-performance computing, nuclear physics, high-energy physics, and fusion energy science.

These basic research programs are central to the mission of the Department. Investment in this research can lead to new scientific discoveries that will maintain U.S. leadership in technology and innovation.

This title also authorizes basic research programs in solar fuels, electricity storage, exascale computing, and low-dose radiation.

The House has previously passed Science Committee legislation by Energy Subcommittee Vice Chairman KNIGHT and subcommittee member HULTGREN to authorize these four key basic research programs.

H.R. 589 represents a bipartisan, bicameral agreement to modernize and increase the productivity of the DOE national lab system, streamline DOE research programs, and prioritize the basic scientific research that will maintain American leadership in science.

Mr. Speaker, I urge my colleagues to support this bill, and I reserve the balance of my time.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I rise today to support the final passage of H.R. 589, the Department of Energy Research and Innovation Act, for which I am pleased to be a cosponsor.

The bill before us today is a result of constructive negotiations with our majority and with our colleagues in the Senate over the last 2 years. I am also pleased to note that many of the provisions in this bill actually were proposed first in the version of the America COMPETES Reauthorization Act, and that was sponsored by every Democratic member of the committee last Congress.

This bill includes what would be the first comprehensive authorization of the DOE Office of Science, which is the largest supporter of physical sciences research in the country. This is a $6.6 billion office that manages 10 of our national laboratories, often called the crown jewels of our national research infrastructure.

Yet, thus far, unlike NSF, NASA, and nearly every other major scientific research agency stewarded by the Federal Government, the Office of Science has not received the statutory guidance and support that its capabilities and mission warrant. So passing this portion of the bill into law alone would be a big step in the right direction.

The bill also includes a number of important technology transfer provisions that previously passed the House as part of a bipartisan bill that I and many of my colleagues on the committee cosponsored.

In addition, it would provide the first authorization of the promising Innovation Hub model for energy research, and it would enable greater private sector management of ARPA-E.

Mr. Speaker, I would like to thank Chairman SMITH and his staff for working closely with us and our Senate counterparts to find common ground in each of these areas, as I believe they will be critical to ensuring our Nation's competitiveness and our clean energy future.

Mr. Speaker, I urge my colleagues to support this bill, and I reserve the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, I yield 2 minutes to the gentleman from Texas (Mr. WEBER), who is the chairman of the Energy Subcommittee of the Science Committee.

Mr. WEBER of Texas. Mr. Speaker, I thank Chairman SMITH for yielding.

Mr. Speaker, I rise in support of H.R. 589, the Department of Energy Research and Innovation Act.

H.R. 589 provides policy direction to the Department of Energy on basic science research and coordination, and implements important reforms to DOE national laboratory management that will modernize the research pipeline.

This legislation gives Congress the opportunity to enact energy research and development policy that prioritizes critical programs at the Department of Energy. From advanced scientific computing to nuclear physics to fusion energy science, focusing on basic research at our national labs provides the best opportunity for U.S. economic growth and technology innovation.

Significant investments, Mr. Speaker, in basic science research by foreign countries like China, as has been alluded to, threatens America's global standing as the leader in scientific knowledge. To maintain our competitive advantage as a world leader in science, we must continue to support the research and research infrastructure that will lead to the next generation of energy technologies.

Mr. Speaker, I want to thank Chairman SMITH and Ranking Member JOHNSON and many of my Science Committee colleagues for cosponsoring this very important legislation. I am grateful for the opportunity to work with members of this committee to guide research that will help America compete around the world and be the leader around the world.

Mr. Speaker, I encourage my colleagues to join me in supporting H.R. 589.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I have no further requests for time. I reserve the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, I yield 2 minutes to the gentleman from Kansas (Mr. MARSHALL), who is the vice chairman of the Research and Technology Subcommittee of the Science Committee.

Mr. MARSHALL. Mr. Speaker, I rise today in support of H.R. 589, the Department of Energy Research and Innovation Act, sponsored by my friend and the chairman of the Science, Space, and Technology Committee, Representative SMITH.

This bipartisan bill advances basic research and sets explicit science priorities for the Department of Energy, which is critical for our future innovation.

H.R. 589 also authorizes the core program in my bill, the Low-Dose Radiation Research Act, which unanimously passed the House earlier this year.

The provision directs the Department of Energy to carry out a research program on low-dose radiation, which will increase our understanding of the health effects low doses have on biological systems.

Research has consistently shown us the adverse health effects associated with high doses of radiation, but we are a long way from accurately assessing the effects of low doses of radiation.

As a product of industrial activities, medical procedures, and naturally occurring systems, humans are exposed to low doses of radiation every day, and it is imperative we can accurately assess this risk.

There is broad consensus among the radiobiology community that more research is necessary for Federal agencies, physicians, and related experts to advance the use of radiation technologies. We have invaluable diagnostic tools today, such as CT scans, which emit low doses of radiation. It is vital physicians are able to inform patients of the health risks associated with these types of imaging processes.

As a physician in my home State of Kansas, I certainly have firsthand understanding of the crucial importance of verified research and ensuring the best medical outcomes for our patients.

Mr. Speaker, I am proud to support this bill, and I urge my colleagues to do the same.

□ 1430

Mr. SMITH of Texas. Mr. Speaker, I have further speakers, but I will yield to the ranking member if she has any speakers. I reserve the balance of my time.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I have no further requests for time. I support passage, and I yield back the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, I yield 2 minutes to the gentleman from California (Mr. KNIGHT), who is the vice chairman of the Energy Subcommittee of the Science, Space, and Technology Committee.

Mr. KNIGHT. Mr. Speaker, I rise in support of the Department of Energy Research and Innovation Act. This bill makes important investments in science and technology research to ensure the United States protects its edge in novel, efficient, and commercially viable energy production.

H.R. 589 makes needed reforms to the national laboratories' relationship with the private sector to streamline the transfer of commercially ready technologies to American businesses.

This will allow the benefits of public investment and critical research to be passed on to American entrepreneurs with greater speed and reinforced economic growth and job creation.

In addition, this bill directs the Department of Energy to establish energy innovation hubs to pull together and create efficiencies in key scientific areas across basic and applied research programs. This bill also includes authorization of the solar fuels initiative, incorporating the text of my bill last Congress, the Solar Fuels Innovation Act.

This provision builds on research that is now being undertaken up and down the coast of California, from Berkeley to Caltech, to produce fuels from sunlight. The solar fuel process, also known as artificial photosynthesis, converts sunlight into energy to create a range of storable chemical fuels, overcoming the biggest obstacle to maximizing the benefits of renewable technologies.

Basic research and artificial photosynthesis and related efforts could lead to a solar fuel system that consolidates solar power and energy storage in a cohesive process. This would transform the economy in California and the rest of the Nation. The solar fuels initiative would solve the critical challenge posed by wasted renewable energy and enlarge incentives to invest in new solar businesses.

Mr. Speaker, I want to thank Chairman SMITH and my colleagues who have helped me advance this bill for their foresight in identifying research initiatives that promise new approaches to energy technology that will be good for our economy and our environment.

Mr. SMITH of Texas. Mr. Speaker, I thank the gentleman from California for his comments and also for his initiatives on the subject of energy in so many ways. Several other bills that we are considering are a result of that initiative.

Mr. Speaker, I have no other requests for time, and I yield back the balance of my time.

The SPEAKER pro tempore (Mr. FRANCIS ROONEY of Florida). The question is on the motion offered by the gentleman from Texas (Mr. SMITH) that the House suspend the rules and concur in the Senate amendment to the bill, H.R. 589.

The question was taken; and (two-thirds being in the affirmative) the rules were suspended and the Senate amendment was concurred in.

A motion to reconsider was laid on the table.

## NUCLEAR ENERGY INNOVATION CAPABILITIES ACT OF 2017

Mr. WEBER of Texas. Mr. Speaker, I move to suspend the rules and pass the bill (S. 97) to enable civilian research and development of advanced nuclear energy technologies by private and public institutions, to expand theoretical and practical knowledge of nuclear physics, chemistry, and materials science, and for other purposes.

The Clerk read the title of the bill.

The text of the bill is as follows:

S. 97

*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 ''Nuclear Energy Innovation Capabilities Act of 2017''.

**SEC. 2. NUCLEAR ENERGY INNOVATION CAPABILITIES.**

(a) NUCLEAR ENERGY.—Section 951 of the Energy Policy Act of 2005 (42 U.S.C. 16271) is amended to read as follows: