

two systems is essential. But this is no simple task.

Both water and energy management are often impacted by many regional challenges and resources and require careful consideration of local factors. For example, back home in Oklahoma, agriculture is the single largest driver of water consumption in the State. But that same agricultural industry also creates a source of energy through biofuels.

Additionally, natural gas production, which is key to the development of a cleaner U.S. energy market, relies on horizontal drilling and hydraulic fracturing, processes which require large volumes of water. But these processes can also produce water, enabling reuse of this resource through fluid lifecycle management.

The Energy and Water Research Integration Act will help prioritize research and development on this critical relationship between energy and water systems and will help American researchers develop tools and technologies to improve our Nation's energy efficiency, environmental stability, and economic growth.

I am pleased to see the work that many Federal agencies, including the Department of Energy and the Environmental Protection Agency, are already doing to improve the efficiency of our energy water systems, and to see the administration's clear prioritization of this work, including the multiagency Water Security Grand Challenge and the recently announced DOE Energy-Water Desalination Hub. But we, in Congress, must also do our part.

Because of the complex relationship between energy and water systems, this will require a multidisciplinary approach. At every step of the R&D process there is a need to facilitate interactions between chemists, engineers, geologists, and legislators, and to encourage collaboration between the Federal Government, industry, universities, and local stakeholders.

I believe this legislation, introduced by Chairwoman JOHNSON and myself, can help to streamline and prioritize this work. The programs authorized in this legislation will leverage the world-leading, early-stage research programs and unparalleled facilities at our national labs and enable the development of next-generation technologies that will improve the efficiency and production in both the energy and water sectors.

I thank my colleagues on the Science, Space, and Technology Committee, particularly Chairwoman EDDIE BERNICE JOHNSON, for continuing to prioritize important research and development programs that will make America stronger, cleaner, and keep us globally competitive. I am grateful for the opportunity to continue to work with my fellow Science, Space, and Technology Committee colleagues to guide this important and bipartisan work.

□ 1515

H.R. 34 prioritizes critical research to help improve the way we use energy and water.

I again want to thank Chairwoman JOHNSON for her leadership on this bill. I urge my colleagues to support this bipartisan legislation, and I yield back the balance of my time.

Ms. JOHNSON of Texas. Mr. Speaker, I rise to make sure that all members of this committee and staff are thanked for their efforts, and I urge support of this bill.

I yield back the balance of my time. The SPEAKER pro tempore. The question is on the motion offered by the gentlewoman from Texas (Ms. JOHNSON) that the House suspend the rules and pass the bill, H.R. 34, 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 VETERANS' HEALTH INITIATIVE ACT

Ms. JOHNSON of Texas. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 617) to authorize the Department of Energy to conduct collaborative research with the Department of Veterans Affairs in order to improve healthcare services for veterans in the United States, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 617

*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 "Department of Energy Veterans' Health Initiative Act".

#### SEC. 2. DEFINITIONS.

In this Act:

(1) DEPARTMENT.—The term "Department" means the Department of Energy.

(2) NATIONAL LABORATORY.—The term "National Laboratory" has the meaning given that term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(3) SECRETARY.—The term "Secretary" means the Secretary of Energy.

#### SEC. 3. PURPOSES.

The purposes of this Act are to advance Department of Energy expertise in artificial intelligence and high-performance computing in order to improve health outcomes for veteran populations by—

(1) supporting basic research through the application of artificial intelligence, high-performance computing, modeling and simulation, machine learning, and large-scale data analytics to identify and solve outcome-defined challenges in the health sciences;

(2) maximizing the impact of the Department of Veterans Affairs' health and genomics data housed at the National Laboratories, as well as data from other sources, on science, innovation, and health care outcomes through the use and advancement of artificial intelligence and high-performance computing capabilities of the Department of Energy;

(3) promoting collaborative research through the establishment of partnerships to improve data sharing between Federal agencies, National Laboratories, institutions of higher education, and nonprofit institutions;

(4) establishing multiple scientific computing user facilities to house and provision available data to foster transformational outcomes; and

(5) driving the development of technology to improve artificial intelligence, high-performance computing, and networking relevant to mission applications of the Department of Energy, including modeling, simulation, machine learning, and advanced data analytics.

#### SEC. 4. DEPARTMENT OF ENERGY VETERANS' HEALTH RESEARCH AND DEVELOPMENT.

(a) IN GENERAL.—The Secretary shall establish and carry out a research program in artificial intelligence and high-performance computing, focused on the development of tools to solve big data challenges associated with veteran's healthcare, and to support the efforts of the Department of Veterans Affairs to identify potential health risks and challenges utilizing data on long-term healthcare, health risks, and genomic data collected from veteran populations. The Secretary shall carry out this program through a competitive, merit-reviewed process, and consider applications from National Laboratories, institutions of higher education, multi-institutional collaborations, and other appropriate entities.

(b) PROGRAM COMPONENTS.—In carrying out the program established under subsection (a), the Secretary may—

(1) conduct basic research in modeling and simulation, machine learning, large-scale data analytics, and predictive analysis in order to develop novel or optimized algorithms for prediction of disease treatment and recovery;

(2) develop methods to accommodate large data sets with variable quality and scale, and to provide insight and models for complex systems;

(3) develop new approaches and maximize the use of algorithms developed through artificial intelligence, machine learning, data analytics, natural language processing, modeling and simulation, and develop new algorithms suitable for high-performance computing systems and large biomedical data sets;

(4) advance existing and construct new data enclaves capable of securely storing data sets provided by the Department of Veterans Affairs, Department of Defense, and other sources; and

(5) promote collaboration and data sharing between National Laboratories, research entities, and user facilities of the Department by providing the necessary access and secure data transfer capabilities.

(c) COORDINATION.—In carrying out the program required under subsection (a), the Secretary is authorized to—

(1) enter into memoranda of understanding in order to carry out reimbursable agreements with the Department of Veterans Affairs and other entities in order to maximize the effectiveness of Department of Energy research and development to improve veterans' healthcare;

(2) consult with the Department of Veterans Affairs and other Federal agencies as appropriate; and

(3) ensure that data storage meets all privacy and security requirements established by the Department of Veterans Affairs, and that access to data is provided in accordance with relevant Department of Veterans Affairs data access policies, including informed consent.

(d) REPORT.—Not later than two years after the date of the enactment of this Act,



the Secretary shall submit to the Committee on Science, Space, and Technology and the Committee on Veterans' Affairs of the House of Representatives, and the Committee on Energy and Natural Resources and the Committee on Veterans' Affairs of the Senate, a report detailing the effectiveness of—

(1) the interagency coordination between each Federal agency involved in the research program carried out under this section;

(2) collaborative research achievements of the program; and

(3) potential opportunities to expand the technical capabilities of the Department.

(e) FUNDING.—There are authorized to be appropriated to the Secretary of Veterans Affairs to carry out this section \$27,000,000 during the period of fiscal years 2020 through 2024.

#### SEC. 5. INTERAGENCY COLLABORATION.

(a) IN GENERAL.—The Secretary is authorized to carry out research, development, and demonstration activities to develop tools to apply to big data that enable Federal agencies, institutions of higher education, non-profit research organizations, and industry to better leverage the capabilities of the Department to solve complex, big data challenges. The Secretary shall carry out these activities through a competitive, merit-reviewed process, and consider applications from National Laboratories, institutions of higher education, multi-institutional collaborations, and other appropriate entities.

(b) ACTIVITIES.—In carrying out the research, development, and demonstration activities authorized under subsection (a), the Secretary may—

(1) utilize all available mechanisms to prevent duplication and coordinate research efforts across the Department;

(2) establish multiple user facilities to serve as data enclaves capable of securely storing data sets created by Federal agencies, institutions of higher education, non-profit organizations, or industry at National Laboratories; and

(3) promote collaboration and data sharing between National Laboratories, research entities, and user facilities of the Department by providing the necessary access and secure data transfer capabilities.

(c) REPORT.—Not later than two years after the date of the enactment of this Act, the Secretary shall submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report evaluating the effectiveness of the activities authorized under subsection (a).

(d) FUNDING.—There are authorized to be appropriated to the Secretary of Energy to carry out subsection (a) \$15,000,000 for each of the fiscal years 2020 through 2023.

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

The Chair recognizes the gentlewoman from Texas.

#### GENERAL LEAVE

Ms. JOHNSON of Texas. Mr. Speaker, I ask unanimous consent that all Members have 5 legislative days to revise and extend their remarks and to include extraneous materials on H.R. 617, the bill under consideration.

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

There was no objection.

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

Mr. Speaker, I rise today in support of H.R. 617, the Department of Energy Veterans' Health Initiative Act. This bill authorizes the Department of Energy to conduct collaborative research with the Department of Veterans Affairs to address large and complex data management challenges associated with veterans' healthcare issues.

H.R. 617 also authorizes the Department of Energy to support activities that will better enable other Federal agencies to leverage the Department's capabilities in developing advanced data analytics tools for a broad range of applications.

I would like to thank the members of the Veterans' Affairs Committee for working with us to improve this legislation. I would also like to thank the bill's sponsor, Mr. NORMAN, for his hard work on this bill.

Before I began my career in politics, I worked as a chief psychiatric nurse for the Dallas VA Medical Center in Dallas, Texas. In that position, I saw firsthand the unique healthcare needs of the veteran community. I believe the bill before us today will be a positive step toward tackling some of the critical problems that the VA is currently facing in providing our veterans with the care they deserve when they come home.

I strongly support this bipartisan bill and encourage my colleagues to do the same.

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

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

Mr. Speaker, I rise in support of Representative NORMAN's bill, H.R. 617, the Department of Energy Veterans' Health Initiative Act.

This bill authorizes a critical and ongoing partnership between the Department of Energy and the Department of Veterans Affairs to improve the way we diagnose and care for our veterans. This partnership, known as the MVP-CHAMPION initiative, allows DOE to support the VA in analyzing healthcare data.

H.R. 617 formally authorizes this program, allowing VA researchers to gain access to DOE's high-performance computing research facilities and significant resources, including DOE's extensive expertise in data analysis and complex modeling.

The VA currently collects genomic and healthcare data, including the deepest levels of DNA sequencing that allows for high-quality genomic research, from veterans who have volunteered for the program. This data is then securely transferred to DOE, where it is stored and analyzed in a secure site at DOE's Oak Ridge National Laboratory.

This partnership and exchange of data benefits both DOE and the VA. The rich and expansive dataset provided by the VA presents an incredible opportunity to train DOE's next-generation computing capacities to solve complex challenges; and with what

they learn from this analysis, the VA can improve and better target health treatments for veterans.

This data can help the VA make discoveries about the causes of various diseases and develop diagnostics to move more quickly to detect them in our veterans. It will also help the VA develop more effective treatments and improve treatment for critical medical needs.

In return, by giving DOE access to such a large database of information, the VA will help DOE researchers improve their ability to develop next-generation computing systems, algorithms, and models, capacities that are critical in maintaining U.S. science and technological leadership.

These enhanced capacities can then be applied in support of DOE's core mission areas and has the potential to enhance expertise in everything from biosciences and material designs to maintaining our nuclear weapons stockpile.

With the next generation of supercomputers right around the corner, most notably, the computing systems that DOE is expected to field in 2021, DOE will be able to tackle even bigger challenges after gaining expertise in solving big data problems like this.

In short, the Department of Energy Veterans' Health Initiative Act will improve the healthcare for those men and women who have served our country. It also maximizes our Federal resources for facilitating collaboration, and gives other agencies, academia, and industry the chance to benefit from the Department of Energy's R&D expertise.

I want to thank Representative NORMAN for championing this important collaboration, along with the basic research that will support our veterans and American innovation.

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

Ms. JOHNSON of Texas. Mr. Speaker, I have no requests for time, and I continue to reserve the balance of my time.

Mr. LUCAS. Mr. Speaker, I yield 5 minutes to the gentleman from South Carolina (Mr. NORMAN).

Mr. NORMAN. Mr. Speaker, I want to thank Chairwoman JOHNSON and Ranking Member LUCAS for their support of this all-important bill.

I rise in support of H.R. 617, the Department of Energy Veterans' Health Initiative Act.

This legislation authorizes a partnership between the Department of Energy—the DOE—and the Department of Veterans Affairs—the VA—to conduct collaborative research in computing, artificial intelligence, and big data science in order to improve healthcare for all of our veterans.

The VA hosts one of the largest and most valuable health datasets. Through its voluntary data collection program, entitled the Million Veterans Program, MVP, the VA has collected



detailed health information and genomic data volunteered by over 600,000 veterans.

But the VA simply doesn't have the computing power or expertise to analyze all of this complex data. In order to learn from their data and provide better healthcare for veterans, the VA needs access to more advanced computing capabilities, expertise, and infrastructure than is currently available at the agency.

As a world leader in high-performance computing, the DOE is an ideal partner to help the VA meet this need. In its national laboratory system, DOE hosts 5 of the world's top 10 fastest supercomputers, including the fastest supercomputer in the world, Summit, at Oak Ridge National Laboratory.

The DOE also funds research and computational sciences and data analytics, which can be used to solve a range of complex big data challenges in the physical sciences. The interagency partnership between DOE and the VA authorized by my bill is necessary to analyze this data and ultimately provide better care for our Nation's veterans.

DOE has the capability to securely store, using supercomputers at the national labs, and analyze the VA's health data to look for patterns. Learning from these patterns can help us improve the medical treatments for heart disease, traumatic brain injury, and cancer.

I think we can all agree that we should be taking any steps possible to improve the medical care of our men and women who have answered the call to serve. Not only does this bill take that step, but it has benefit in giving our scientists the ability to analyze complex data that will help America remain the world's leader in advanced computing.

The bill also requires the DOE to establish data storage facilities to securely transmit and store data that the VA provides. This will make certain that privacy and security are maintained for veterans who volunteer for the programs.

I am grateful that my colleagues on both sides of the aisle have been able to come together and move this bill forward. Providing better care for our veterans is a place where we can find common ground, especially since America's veterans fought to keep us all safe, regardless of our political party.

In closing, I would like to thank my fellow Committee on Science, Space, and Technology members who cosponsored this legislation and the many veterans serving in the House who supported my bill. I also want to thank Secretary of Energy Rick Perry, who has been a strong advocate of this partnership.

Mr. Speaker, I encourage my colleagues to vote "yes" in favor of improving healthcare for veterans.

Mr. LUCAS. Mr. Speaker, I yield 5 minutes to the gentlewoman from Puerto Rico (Miss GONZÁLEZ-COLÓN).

Miss GONZÁLEZ-COLÓN of Puerto Rico. Mr. Speaker, I thank Ranking Member LUCAS for yielding me the time.

I rise in strong support of H.R. 617, the Department of Energy Veterans' Health Initiative Act, introduced by my colleague, Congressman RALPH NORMAN from South Carolina.

I think this bill is very simple, but very essential at the same time. It essentially authorizes collaboration between the Department of Energy and the Department of Veterans Affairs to establish a program that facilitates computing capabilities to process data on health issues affecting all of our veterans. The bill will subsequently support the Veterans Administration with identifying potential health risks and challenges that our communities have.

I think it is important because combining those processing capabilities with health information compiled by the VA will help us to better understand the healthcare issues related to our veterans and the general population as well and ensures that both agencies will remain at the forefront of scientific and medical research.

I am a proud cosponsor of this bill on behalf of our veterans. Actually, we have more than 90,000 veterans registered in Puerto Rico, and we are very grateful to Congressman RALPH NORMAN for introducing this bill.

I want to also thank Chairwoman JOHNSON and Ranking Member LUCAS for their great work together on behalf of the scientific community and our veterans.

I urge all of my colleagues to vote in favor of this bill.

Mr. LUCAS. Mr. Speaker, I yield myself such time as I may consume to close, since I have no additional speakers.

Mr. Speaker, simply put, H.R. 617 harnesses the power of DOE's supercomputers to revolutionize the way we care for America's veterans.

I want to thank Representative NORMAN for his leadership on this bill.

I strongly encourage my colleagues to support this bipartisan legislation, and I yield back the balance of my time.

Ms. JOHNSON of Texas. Mr. Speaker, I would like to close by simply thanking all of the members of the full committee, as well as the staff, and to urge passage of this legislation, H.R. 617.

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 Texas (Ms. JOHNSON) that the House suspend the rules and pass the bill, H.R. 617, 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.

□ 1530

# COMMUNICATION FROM THE CLERK OF THE HOUSE

The SPEAKER pro tempore laid before the House the following communication from the Clerk of the House of Representatives:

OFFICE OF THE CLERK,  
U.S. HOUSE OF REPRESENTATIVES,  
Washington, DC, July 23, 2019.

Hon. NANCY PELOSI,  
Speaker, House of Representatives,  
Washington, DC.

DEAR MADAM SPEAKER: Pursuant to the permission granted in Clause 2(h) of Rule II of the Rules of the U.S. House of Representatives, the Clerk received the following message from the Secretary of the Senate on July 23, 2019, at 11:34 a.m.:

That the Senate passed S. 1199.

With best wishes, I am,  
Sincerely,

CHERYL L. JOHNSON.

## OPPOSING GLOBAL BOYCOTT, DIVESTMENT, AND SANCTIONS MOVEMENT TARGETING ISRAEL

Mr. ENGEL. Mr. Speaker, I move to suspend the rules and agree to the resolution (H. Res. 246) opposing efforts to delegitimize the State of Israel and the Global Boycott, Divestment, and Sanctions Movement targeting Israel, as amended.

The Clerk read the title of the resolution.

The text of the resolution is as follows:

### H. RES. 246

Whereas the democratic, Jewish State of Israel is a key ally and strategic partner of the United States;

Whereas since Israel's founding in 1948, Congress has repeatedly expressed our Nation's unwavering commitment to the security of Israel as a Jewish and democratic state;

Whereas it is a hallmark of American democracy for citizens to petition the United States Government in favor of or against United States foreign policy;

Whereas the United States Constitution protects the rights of United States citizens to articulate political views, including with respect to the policies of the United States or foreign governments;

Whereas American policy has long sought to bring peace to the Middle East and recognized that both the Israeli and Palestinian people should be able to live in safe and sovereign states, free from fear and violence, with mutual recognition;

Whereas support for peace between the Israelis and Palestinians has long-standing bipartisan support in Congress;

Whereas it is the long-standing policy of the United States that a peaceful resolution to the Israeli-Palestinian conflict should come through direct negotiations between the Government of Israel and the Palestinian Authority, with the support of countries in the region and around the world;

Whereas cooperation between Israel and the United States is of great importance, especially in the context of rising anti-Semitism, authoritarianism and security problems in Europe, the Middle East, and North Africa;

Whereas the Global Boycott, Divestment and Sanctions Movement (BDS Movement) targeting Israel is a campaign that does not favor a two-state solution and that seeks to