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HOUSE OF REPRESENTATIVES
REPORT
117–413

ENERGY CYBERSECURITY UNIVERSITY LEADERSHIP ACT OF 2022

JULY 15, 2022.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Ms. JOHNSON of Texas, from the Committee on Science, Space, and Technology, submitted the following

R E P O R T

[To accompany H.R. 7569]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 7569) to direct the Secretary of Energy to establish a program to provide financial assistance to graduate students and postdoctoral researchers pursuing certain courses of study relating to cybersecurity and energy infrastructure, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

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II. PURPOSE OF THE BILL

The purpose of the bill is to direct the Secretary of Energy to establish a program to provide financial assistance to graduate students and postdoctoral researchers pursuing certain courses of study relating to cybersecurity and energy infrastructure. H.R. 7569 is sponsored by Ms. Ross and cosponsored by Mr. Carey and Ms. Bonamici.

III. BACKGROUND AND NEED FOR THE LEGISLATION

This legislation originates from the need to address the workforce requirements associated with revamping our present approach for securing energy infrastructure from cyberattacks. Current methodology focuses primarily on retroactively mitigating cybersecurity vulnerabilities in energy-related critical infrastructure after an intrusion occurs, which is inefficient, ineffective, and costly. Instead, cybersecurity considerations must be integrated into the research, design, and development of new energy infrastructure to cost effectively enhance its security, resilience, and reliability. Successfully employing such an approach requires a diverse, inclusive, and highly skilled workforce with energy-specific cybersecurity expertise and familiarity with associated research, development, and demonstration needs. A dedicated science scholarship program at the Department of Energy (the Department or DOE) for graduate students and postdoctoral researchers studying energy-specific cybersecurity disciplines could help address these workforce needs.

IV. COMMITTEE HEARINGS

Pursuant to clause 3(c)(6) of rule XIII of the Rules of the House of Representatives, the Committee designates the following hearing as having been used to develop or consider the legislation:

On March 18, 2021, the Committee held a hearing entitled "Lessons Learned from the Texas Blackouts: Research Needs for a Secure and Resilient Grid." The purpose of the hearing was to understand the causes of the extended power outages in Texas and other southern and midwestern states during a severe winter storm in February 2021 and to examine associated grid research and development needs.

Witnesses:

- Dr. Jesse Jenkins, Assistant Professor of Mechanical and Aerospace Engineering, Andlinger Center for Energy and the Environment at Princeton University
- Dr. Varun Rai, Associate Dean for Research; Professor of Public Affairs, LBJ School of Public Affairs at the University of Texas at Austin
- Mr. Juan Torres, Associate Laboratory Director, Energy Systems Integration, National Renewable Energy Laboratory
- Ms. Beth Garza, Senior Fellow, R Street Institute
- Dr. Sue Tierney, Senior Advisor, Analysis Group

V. COMMITTEE CONSIDERATION AND VOTES

The Committee on Science, Space, and Technology met to consider H.R. 7569 on May 17, 2022. Ms. Lofgren moved that the Committee favorably report the bill to the House of Representatives

with the recommendation that the bill be approved. *The motion was agreed to by a voice vote.*

VI. SUMMARY OF MAJOR PROVISIONS OF THE BILL

H.R. 7569 authorizes the Secretary of Energy to establish a program that would provide financial assistance for scholarships, fellowships, and research and development projects at institutions of higher education to support graduate students and postdoctoral researchers pursuing coursework at the intersection of cybersecurity and energy infrastructure. Awardees under this program would also be provided with research traineeships at National Laboratories and utilities to gain practical, hands-on experience with developing and testing new tools and technologies. More broadly, the program would serve as a mechanism for diversifying the nation's energy infrastructure workforce by expanding DOE's outreach to historically Black colleges and universities, Tribal Colleges and Universities, and minority-serving institutions.

VII. SECTION-BY-SECTION ANALYSIS (BY TITLE AND SECTION)

Sec. 1. Short title

Section 1 establishes that H.R. 7569 may be cited as the "Energy Cybersecurity University Leadership Act of 2022".

Sec. 2. Energy cybersecurity university leadership program

Subsection (a) establishes findings.

Subsection (b) directs the Secretary of Energy to establish an Energy Cybersecurity University Leadership Program (the Program) to support graduate students and postdoctoral researchers pursuing a course of study that integrates cybersecurity competencies within disciplines associated with energy infrastructure needs. Specifically, the bill authorizes the Secretary to provide financial assistance on a competitive basis for scholarships, fellowships, and research and development projects at institutions of higher education, as well as research traineeship experiences at National Laboratories and utilities. The Secretary is also directed to leverage the Program to expand outreach to historically Black colleges and universities, Tribal Colleges or Universities, and minority-serving institutions.

Subsection (c) directs the Secretary to submit a report on the implementation of the program to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate within one year of enactment of H.R. 7569.

Subsection (d) defines terms used in section 2.

VIII. COMMITTEE VIEWS

In implementing this program, the Committee encourages the Department to prioritize coordination between the appropriate program offices. The Committee continues to emphasize the importance of preparing the next generation of the energy workforce for emerging challenges, in order to ensure our national security and global competitiveness.

IX. COST ESTIMATE

Pursuant to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

X. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

No Congressional Budget Office Cost Estimate.

XI. FEDERAL MANDATES STATEMENT

H.R. 7569 contains no unfunded mandates.

XII. COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

The Committee's oversight findings and recommendations are reflected in the body of this report.

XIII. STATEMENT ON GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause (3)(c)(4) of rule XIII of the Rules of the House of Representatives, the goal of H.R. 7569 is to increase the long-term resilience of the nation's energy infrastructure through the creation of a workforce with relevant skillsets and expertise. The legislation will require the Department to provide a report on the implementation of the authorized program.

XIV. FEDERAL ADVISORY COMMITTEE STATEMENT

No Federal Advisory Committees are created by H.R. 7569.

XV. DUPLICATION OF FEDERAL PROGRAMS

Pursuant to clause 3(c)(5) of rule XIII of the Rules of the House of Representatives, the Committee finds that no provision of H.R. 7569 establishes or reauthorizes a program of the federal government known to be duplicative of another federal program, including any program that was included in a report to Congress pursuant to section 21 of Public Law 111–139 or the most recent Catalog of Federal Domestic Assistance.

XVI. EARMARK IDENTIFICATION

Pursuant to clauses 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 7569 contains no earmarks, limited tax benefits, or limited tariff benefits.

XVII. APPLICABILITY TO THE LEGISLATIVE BRANCH

The Committee finds that H.R. 7569 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

XVIII. STATEMENT ON PREEMPTION OF STATE, LOCAL, OR TRIBAL LAW

This bill is not intended to preempt any state, local, or tribal law.

XIX. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

This legislation does not amend any existing Federal statute.

XX. PROCEEDINGS OF THE FULL COMMITTEE MARKUP

MARKUPS: H.R. 7180, THE BRYCEN GRAY AND BEN PRICE COVID–19 COGNITIVE RESEARCH ACT; H.R. 7289, THE FEDERAL PFAS RESEARCH EVALUATION ACT; H.R. 7361, THE NATIONAL WEATHER SERVICE COMMUNICATIONS IMPROVEMENT ACT; H.R. 7569, THE ENERGY CYBERSECURITY UNIVERSITY LEADERSHIP ACT OF 2022

MARKUP

BEFORE THE

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

MAY 17, 2022

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H.R. 7569, THE ENERGY CYBERSECURITY UNIVERSITY LEADERSHIP ACT OF 2022

H.R. 7361, THE NATIONAL WEATHER SERVICE COMMUNICATIONS IMPROVEMENT ACT

H.R. 7289, THE FEDERAL PFAS RESEARCH EVALUATION ACT

H.R. 7180, THE BRYCEN GRAY AND BEN PRICE COVID–19 COGNITIVE RESEARCH ACT

TUESDAY, MAY 17, 2022

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, D.C.

The Committee met, pursuant to notice, at 12:30 p.m., in room 2318, Rayburn House Office Building, Hon. Eddie Bernice Johnson [Chairwoman of the Committee] presiding.

Chairwoman JOHNSON. Good morning—or afternoon. The Committee will come to order. And without objection, the Chair is authorized to declare a recess at any time.

Pursuant to Committee rule II(e) and House rule XI, the Chair announces that roll call votes may be postponed.

Today, the Committee is meeting both in person and virtually, and I want to announce a couple reminders to Members about the conduct of the hearing. First, Members and staff who are attending in person may choose to be masked, but it is not a requirement. However, any individuals with symptoms, a positive test, or exposure to someone with COVID–19 should wear a mask while present.

Members who are attending virtually should keep their video feed on as long as they are present in the meeting. Members are responsible for their own microphones. Please keep your microphones muted unless you are speaking.

And finally, if Members have documents they wish to submit for the record, please email them to the Committee Clerk, whose email address was circulated prior to the meeting.

Pursuant to the notice, the Committee meets to consider the following measures: H.R. 7569, the *Energy Cybersecurity University*

Leadership Act of 2022; H.R. 7361, the *National Weather Service Communications Improvement Act;* H.R. 7289, the *Federal PFAS Research Evaluation Act;* and H.R. 7180, the *Brycen Gray and Ben Price COVID–19 Cognitive Research Act.*

Let me say good afternoon and welcome to today's markup of four good bipartisan bills. I know it's a busy day, and I will be brief. The first bill we're considering is the *Energy Cybersecurity University Leadership Act of 2022,* which was introduced by Representative Ross. This legislation would authorize the Secretary of Energy to provide financial assistance to graduate students and postdoctoral researchers pursuing coursework at the intersection of cybersecurity and energy infrastructure. The ultimate aim of this act is to contribute to the development of a diverse, inclusive, and highly skilled work force with the knowledge and expertise required for integrating cybersecurity considerations into the research, design, and development of new energy infrastructure. I urge my colleagues to join me in supporting this crucial legislation.

The next bill we will consider is the *National Weather Service Communications Improvement Act,* a bipartisan bill introduced by Randy Feenstra. Reliable communication is critical during weather events. It is vitally important to ensure that National Weather Service (NWS) employees can communicate without difficulty or delay. This bill will upgrade National Weather Service communications systems to bring them into the 21st century. This is a good bill, and I urge its adoption.

Next, we will consider the *Federal PFAS Research Evaluation Act.* This bipartisan bill was introduced by Representative Lizzie Fletcher. The PFAS compounds are found in many common products such as firefighting foam, cookware, and packaging. However, there is still a lot we do not understand about these chemicals. This bill would help to address knowledge gaps in our understanding on various topics. This bill directs the EPA (Environmental Protection Agency) Administrator to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a series of studies to identify the research and development needed to improve the understanding. The bill also requires the Director of the Office of Science and Technology Policy to submit an implementation plan for Federal research and development activities. We must continue to deepen our understanding of these substances, and this bill will help us get there. This is a good bipartisan bill, and I urge my colleagues to support it.

The final bill for today's markup was introduced by Representative Gonzalez. It is the *Brycen Gray and Ben Price COVID–19 Cognitive Research Act.* While the fog of the COVID–19 pandemic is beginning to clear, we are all eager to resume something resembling normalcy. Many COVID–19 survivors, however, are still suffering. Early research results indicate that a COVID–19 infection may leave individuals with an increased risk of developing mental health conditions. And they may be at an increased risk of death by suicide and drug overdose. While researchers are raising alarms about these risks, improved data collection and additional research are needed to better understand the mental health implications of a COVID–19 infection. This bill directs the National Science Foun-

dation (NSF) to rally the research community to take on this task. I urge my colleagues to support this important bill.

And I want to thank my colleagues for participating in today's markup, and I want to give a special thanks to my most efficient and my special friend Representative Lofgren, who will be taking the gavel for me today.

[The prepared statement of Chairwoman Johnson follows:]

Hello, and welcome to today's markup of four good bipartisan bills. I know it's a busy day, so I will be brief.

The first bill we are considering is the *Energy Cybersecurity University Leadership Act of 2022*, which was introduced by Representative Ross. This legislation would authorize the Secretary of Energy to provide financial assistance for graduate students and postdoctoral researchers pursuing coursework at the intersection of cybersecurity and energy infrastructure. The ultimate aim of this act is to contribute to the development of a diverse, inclusive, and highly skilled workforce with the knowledge and expertise required for integrating cybersecurity considerations into the research, design, and development of new energy infrastructure. I urge my colleagues to join me in supporting this crucial legislation.

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The bill also requires the Director of the Office of Science and Technology Policy to submit an implementation plan for federal PFAS research and development activities. We must continue to deepen our understanding of PFAS substances, and this bill will help us get there. This is a good bipartisan bill, and I urge my colleagues to support it.

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I want to thank my colleagues for participating in today's markup. And I want to give a special thanks to my friend Representative Lofgren who will be taking the gavel for me today.

With that I now recognize the Ranking Member to present his opening remarks.

Chairwoman JOHNSON. With that, I recognize our Ranking Member to present his opening remarks.

Mr. LUCAS. Thank you, Chairwoman Johnson, for holding today's hearing, markup of bipartisan environment, research, and cyber bills. First up is H.R. 7569, the *Energy Cybersecurity University Leadership Act of 2022.* It's never been more critical to ensure the cybersecurity of our Nation's energy sector. In recent months, our liquefied natural gas industry has faced numerous cyberattacks by Russian actors. And in March, the President and FBI (Federal Bureau of Investigation) warned us of credible threats to our energy

infrastructure. The Department of Energy plays a central role in safeguarding this infrastructure and has launched some new initiatives recently to address these issues.

That's why Ranking Member Weber and I recently wrote to Secretary Granholm to ask for more information about the Department's work in this area. H.R. 7569 is one more avenue to strengthen our energy cybersecurity. This legislation directs the Secretary of Energy to establish a program to provide financial assistance to graduate students and postdoctoral researchers pursuing work related to cybersecurity and energy infrastructure. The program will also provide them with valuable research traineeship experiences at the national laboratories and utilities.

Additionally, the bill ensures that we are connecting with students across the country by conducting outreach to historically Black colleges and universities (HBCUs), tribal colleges or universities, and minority-serving institutions. This is important legislation that will help address expanding vulnerabilities in our energy-related critical infrastructure by strengthening the next generation of our energy cybersecurity force.

Next, we'll have H.R. 7361, the *National Weather Service Communication Improvement Act.* The National Weather Service uses an instant messaging system, also known as NWS Chat, to communicate quickly with forecast offices and emergency officials. NWS Chat is a legacy, web-based system developed internally by NWS decades ago. In recent years, it's experienced failures during severe weather events when a large number of users log in at once.

After the last 2 years of remote and hybrid work, I'm sure all of us know just how frustrating it is when communications go down during our busiest times. But when NWS Chat goes down, it doesn't just delay our debates on bills, it can endanger lives. Living in Tornado Alley, I am very familiar with how quickly storms can form and change direction. Every second counts during weather emergencies, and we cannot afford a failing system.

This bill authorizes the Weather Service to upgrade to a commercial off-the-shelf solution. Not only will it improve reliability, but it will also allow NWS to take advantage of continuous technology upgrades. And I'd like to thank Ranking Member Feenstra for introducing this bill.

The next bill before us is H.R. 7289, the *Federal PFAS Research Evaluation Act.* PFAS refers to a large group of high-strength, highly durability chemicals used in industry and consumer products. Because of their durability, they don't break down easily and last a long time in the environment. In some instances, that creates hazards to human health.

This bill addresses that by directing the Environmental Protection Agency to enter into an agreement with the National Academies to conduct two studies. The first is to better understand human exposure and behavior and toxicity of PFAS. It will allow us to better address research and knowledge gaps in Federal research as identified by the National Academies in 2020. The second study is focused on understanding the extent and implications of PFAS contamination, as well as research needed to manage and treat contamination, and develop safe alternatives. Together, these

studies will help us better address PFAS using the best available science.

Finally, we'll consider Representative Gonzalez's bill, H.R. 7180, the *Brycen Gray and Ben Price COVID–19 Cognitive Research Act.* The bill is named for two men who died by suicide after suffering neurological problems caused by COVID–19. Tragically, there have been many numerous instances of psychosis developed—developing after COVID illnesses. This neurological disease is not well-understood, and this bill will help change that.

The bill directs NSF to support research on the long-term mental health effects of COVID, particularly in adolescents. It also instructs the NSF to commission a National Academies study on the disruption of cognitive processes associated with COVID. Research on mental health issues associated with COVID has been progressing as we continue to learn more about the long-term effects of the disease. This bill will help accelerate these efforts to better inform the public and medical community. And hopefully, it will prevent more tragic deaths.

I'd like to thank Representative Gonzalez for his work on this important issue, and I look forward to getting this bill and the others on the docket today passed into law quickly.

I yield back the balance of my time, Madam Chair.

[The prepared statement of Mr. Lucas follows:]

Thank you, Chairwoman Johnson, for holding today's markup of bipartisan environment, research, and cybersecurity bills.

First up is H.R. 7569, the *Energy Cybersecurity University Leadership Act of 2022.* It's never been more critical to ensure the cybersecurity of our nation's energy sector. In recent months, our liquefied natural gas (LNG) industry has faced numerous cyberattacks by Russian actors. And in March, the President and FBI warned us of credible threats to our energy infrastructure.

The Department of Energy plays a central role in safeguarding this infrastructure and has launched some new initiatives recently to address these issues. That's why Ranking Member Weber and I recently wrote to Secretary Granholm to ask for more information about the Department's work in this area.

H.R. 7569 is one more avenue to strengthen our energy cybersecurity. This legislation directs the Secretary of Energy to establish a program to provide financial assistance to graduate students and postdoctoral researchers pursuing work related to cybersecurity and energy infrastructure.

The program will also provide them with valuable research traineeship experiences at the National Laboratories and utilities. Additionally, the bill ensures we are connecting with students across the country by conducting outreach to historically Black colleges and universities, Tribal Colleges or Universities, and minority-serving institutions.

This is important legislation that will help address expanding vulnerabilities in our energy-related critical infrastructure by strengthening the next generation of our energy cybersecurity workforce.

Next, we have H.R. 7361, the *National Weather Service Communication Improvement Act.* The National Weather Service uses an instant messaging system, known as NWS Chat, to communicate quickly with forecast offices and emergency officials.

NWS Chat is a legacy, web-based system developed internally by NWS decades ago. In recent years, it has experienced failures during severe weather events when a large number of users log in at once.

After the last two years of remote and hybrid work, I'm sure all of us know just how frustrating it is when communications go down during our busiest times. But when NWS Chat goes down, it doesn't just delay our debates on bills - it can endanger lives.

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vantage of continuous technology upgrades. I'd like to thank Ranking Member Feenstra for introducing this bill.

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The second study is focused on understanding the extent and implications of PFAS contamination, as well as research needed to manage and treat contamination, and develop safe alternatives. Together, these studies will help us better address PFAS using the best available science.

Finally, we'll consider Rep. Gonzalez's bill, H.R. 7180, the *Brycen Gray and Ben Price COVID–19 Cognitive Research Act.*

The bill is named for two men who died by suicide after suffering neurological problems caused by COVID–19. Tragically, there have been numerous instances of psychosis developing after COVID illnesses. This neurological disease is not well understood, and this bill will help to change that.

The bill directs NSF to support research on the long-term mental health effects of COVID, particularly in adolescents. It also instructs NSF to commission a National Academies study on the disruption of cognitive processes associated with COVID.

Research on mental health issues associated with COVID has been progressing as we continue to learn more about the long-term effects of the disease. This bill will help accelerate these efforts, to better inform the public and medical community. And hopefully, it will prevent more tragic deaths.

I'd like to thank Rep. Gonzalez for his work on this important issue and I look forward to getting this bill and the others on the docket today passed into law quickly.

I yield the balance of my time.

Ms. LOFGREN [presiding]. The gentleman yields back. Other Members are invited to put opening statements into the record.

We'll now consider H.R. 7569, the *Energy Cybersecurity University Leadership Act of 2022.* The Clerk will report the bill.

The CLERK. H.R. 7569, to direct the Secretary of Energy to establish——

[The bill follows:]

I

117TH CONGRESS
2D SESSION

H. R. 7569

To direct the Secretary of Energy to establish a program to provide financial assistance to graduate students and postdoctoral researchers pursuing certain courses of study relating to cybersecurity and energy infrastructure.

IN THE HOUSE OF REPRESENTATIVES

APRIL 25, 2022

Ms. ROSS (for herself and Mr. CAREY) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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A BILL

To direct the Secretary of Energy to establish a program to provide financial assistance to graduate students and postdoctoral researchers pursuing certain courses of study relating to cybersecurity and energy infrastructure.

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 Cybersecurity University Leadership Act of 2022".

SEC. 2. ENERGY CYBERSECURITY UNIVERSITY LEADERSHIP PROGRAM.

(a) FINDINGS.—Congress finds the following:

(1) Addressing cybersecurity vulnerabilities in energy-related critical infrastructure after an intrusion occurs is inefficient, ineffective, and costly.

(2) Integrating cybersecurity considerations into the research, design, and development of energy infrastructure represents a cost-effective approach to enhancing the security, resilience, and reliability of the electric grid, oil and natural gas pipelines, and other energy distribution, transmission, and generation systems.

(3) Successfully employing the approach outlined in paragraph (2) as a guiding principle for the Department's energy infrastructure activities will require a diverse, inclusive, and highly skilled workforce which possesses energy-specific cybersecurity expertise and familiarity with associated research, development, and demonstration needs.

(4) A dedicated science scholarship program at the Department for graduate students and postdoctoral researchers studying energy-specific cybersecurity disciplines could help address the challenges stated in paragraphs (1) through (3).

(b) PROGRAM.—

(1) ESTABLISHMENT.—The Secretary of Energy shall establish an Energy Cybersecurity Univer-

sity Leadership Program (referred to in this section as the "Program") to carry out the activities described in paragraph (2).

(2) PROGRAM ACTIVITIES.—The Secretary shall—

(A) provide financial assistance, on a competitive basis, for scholarships, fellowships, and research and development projects at institutions of higher education to support graduate students and postdoctoral researchers pursuing a course of study that integrates cybersecurity competencies within disciplines associated with energy infrastructure needs;

(B) provide graduate students and postdoctoral researchers supported under the Program with research traineeship experiences at National Laboratories and utilities; and

(C) conduct outreach to historically Black colleges and universities, Tribal Colleges or Universities, and minority-serving institutions.

(c) REPORT.—Not later than 1 year 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 En-

ergy and Natural Resources of the Senate a report on the development and implementation of the Program.

(d) DEFINITIONS.—In this section:

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

(2) HISTORICALLY BLACK COLLEGE AND UNIVERSITY.—The term "historically Black college and university" has the meaning given the term "part B institution" in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061).

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

(4) MINORITY-SERVING INSTITUTION.—The term "minority-serving institution" means an eligible institution under section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)).

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

(6) TRIBAL COLLEGE OR UNIVERSITY.—The term "Tribal College or University" has the meaning

given such term in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b)).

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Ms. LOFGREN. Without objection, the bill is considered as read and open to amendment at any point.

Does anyone wish to be recognized to speak on the underlying bill?

Ms. ROSS. Madam Chair?

Ms. LOFGREN. Ms. Ross, you're recognized.

Thank you very much, Madam Chair, and I move to strike the last word.

Ms. LOFGREN. The gentlelady is recognized for 5 minutes.

Ms. ROSS. Thank you, Madam Chair. And thank you to the Ranking Member also for holding this markup on these critically important bills and for their support of H.R. 7569.

The United States has witnessed an alarming rise in cybersecurity threats and attacks against energy infrastructure. My home State of North Carolina is no exception. Just 1 year ago a disastrous cyber-attack on the Colonial Pipeline caused the company to halt all pipeline operations, prompting fears of rising gas prices that resulted in panic buying of gasoline and diesel fuel across my home State. Roughly 2/3 of North Carolina's nearly 5,400 gas stations ran out of fuel, including over 70 percent of gas stations in Raleigh, the capital, which is in my district. Our constituents rely on reliable energy sources for their lives and for their livelihoods, and we cannot afford to be vulnerable to these types of attacks.

The *Energy Cybersecurity University Leadership Act,* a bipartisan bill I'm cosponsoring with Congressman Carey of Ohio, will help address our vulnerabilities. This bill will confront growing cyber threats against our country's critical energy infrastructure by making real investments in a strong and diverse work force that's ready to meet the challenges that we face. It will provide financial assistance to support graduate students studying the convergence of cybersecurity and energy infrastructure, in addition to providing hands-on training and research experience at our national laboratories and utilities. It will also expand the Department of Energy's outreach to HBCUs, minority-serving institutions, and tribal colleges.

I represent much of the Research Triangle in North Carolina, home to institutions and universities that are propelling our Nation's innovation in cybersecurity and energy. From NC State to Shaw University to Saint Augustine's and Wake Tech, this legislation will better equip our brilliant students and researchers in North Carolina and beyond to tackle the challenging cybersecurity landscape. I urge my colleagues to support H.R. 7569 and the other bills before us today.

Thank you, Madam Chair, and I yield back.

Ms. LOFGREN. The gentlelady yields back.

Mr. Carey is recognized.

Mr. CAREY. Thank you, Madam Chair. Thank you, Ranking Member Lucas and Members of the Committee, for granting me a few minutes to speak in support of this important bipartisan legislation that will address the rising cyber threats to our critical energy infrastructure.

H.R. 7569, the *Energy Cybersecurity University Leadership Act,* addresses work force needs associated with protecting our energy infrastructure from cyber attacks.

Energy is our most valuable commodity. It makes modern life possible. Our economy depends on an abundant, reliable, and secure supply of energy to function. Whether it's manufacturing, fueling our vehicles, or keeping the lights on, we rely on pipelines, refineries, transportation networks, power plants, transmission lines, and a distribution system to power our lives. All of these things and more make up our energy infrastructure as part of a high-tech system that could be susceptible to cyber attacks.

Last year, we found out how vulnerable these systems can be when a ransomware attack on America's largest fuel pipeline system, the Colonial Pipeline, led to operations being halted along the entire Eastern Seaboard for a total of 6 days. Fuel prices skyrocketed, shortages created massive lines at gas stations, and the regional and state of emergency was declared by the Biden Administration.

Since then, the threat of cyber attacks on our energy infrastructure has only increased. Our adversaries are constantly searching for vulnerabilities in our system, and we must take urgent action to prevent more cyber attacks like the Colonial Pipeline. One of the major problems we face in securing our energy infrastructure from future cyber attacks is the method in which they are addressed. We must be protective in addressing our cyber attacks. Addressing cybersecurity vulnerabilities after an attack occurs is insufficient, ineffective, and quite frankly very costly. Integrating cybersecurity considerations into research, design, and development of energy infrastructure represents a cost-effective approach to enhancing the security, resilience, and reliability of our energy systems.

The program created by this legislation through the Department of Energy will provide financial assistance on a competitive basis for scholarships, fellowships, and research development projects to support graduate students, postdoctoral researchers pursuing coursework at the intersection of cybersecurity and energy infrastructure. Awardees under this program would also be provided with research training, fellowships, national laboratories—at the national laboratories, and utilities to gain practical hands-on experience with developing and testing new tools and technologies. This dedicated science scholarship will help address the challenges we face and strengthen the energy infrastructure, as well as our economy.

America has been unified in our response to our adversaries seeking to attack our energy networks, which is why I am proud to have worked bipartisanly with Representative Ross to introduce this legislation for our Committee's quick action to move it forward. I thank you, and I yield back.

Ms. LOFGREN. The gentleman yields back.

Mr. McNerney is recognized to strike the last word.

Mr. MCNERNEY. Madam Chair, I rise in support of H.R. 7569, the *Energy Cybersecurity University Leadership Act,* which will help hold the work force required to confront the Nation's increasingly urgent cybersecurity needs. I've long been a proponent for improving the physical and cybersecurity of our energy infrastructure,

which has become increasingly important as our energy systems become more interconnected and digitized and allow more remote access.

As Co-Chair of the Grid Innovation Caucus, I've helped write and pass bills that create programs at the Department of Energy that tests the cybersecurity of projects that facility—facilitate partnerships between government and industry. However, establishing these programs is only the first step. We will need to train the next generation of cybersecurity professionals in order to ensure that this work is carried forward and that it keeps up with the evolving technology landscape and emergency threats—emerging threats.

This bill would authorize the Secretary of Energy to provide financial assistance and research opportunities for graduate students and postdoctoral researchers pursuing coursework related to the cybersecurity of energy systems. It would also direct the Secretary to conduct outreach to institutions of higher education that would diversify the work force. It's critical that we invest in building a stronger, more diverse cybersecurity work force to ensure we are future perfect, our energy's infrastructure, and it is critical that we reach these workers early in their careers.

This bill demonstrates that matters related to personnel deserve the same attention that we give to technology. For this reason, I urge the support of H.R. 7569, and I yield back.

Ms. LOFGREN. The gentleman yields back.

Does any other Member wish to be heard on the underlying bill?

Seeing no one, no amendments have been pre-filed. Is anyone seeking to offer an amendment at this time?

Hearing no one, if not, a reporting quorum is present, I move that the Committee on Science, Space, and Technology report H.R. 7569 to the House with the recommendation that the bill be approved.

Those in favor of the motion will say aye.

Opposed will say no.

In the opinion of the Chair, the ayes have it. The bill is favorably reported.

And without objection, the motion to reconsider is laid upon the table. I ask unanimous consent that staff be authorized to make any necessary technical and conforming changes to the bill. And without objection, that is ordered.

Members will have 2 subsequent calendar days in which to submit supplemental, minority, or additional views on the measure.

