

and has placed important expensive projects at risk.

This legislation directs NSF to collaborate with other appropriate agencies and ARF operators on the creation of a networking and cybersecurity improvement plan that could address these challenges by assessing equipment and personnel costs and time requirements for upgrading the fleet and developing a proposal for funding these upgrades.

The Senate companion to this bill, led by California's own Senators Padilla and Sullivan, recently passed out of the Senate Commerce Committee, so we have a real opportunity to get this bill passed and begin the process of closing this unfortunate gap so that the science gets done.

I thank the bill's sponsors, Mr. MIKE GARCIA and Ms. STEVENS, for their work on the ANCHOR Act. I thank the chairman for his continuing bipartisan support on the committee.

We have made tremendous progress this year. I urge everyone to join me in supporting the act, and I reserve the balance of my time.

Mr. LUCAS. Mr. Speaker, I yield such time as he may consume to the gentleman from California (Mr. MIKE GARCIA), to speak on his bill.

Mr. MIKE GARCIA of California. Mr. Speaker, I rise in support and thank Chairman LUCAS and the committee staff for their support as well of H.R. 7630, the ANCHOR Act, which protects our scientific infrastructure from CCP espionage.

I also thank my colleague from across the aisle, Ms. STEVENS, for her support in cosponsoring this bill as well.

As I said during the markup of this very important piece of legislation, the U.S. is the proud home to some of the best minds in the world, minds that keep our Nation on the cutting edge of scientific research, driving our national security, our economy, our healthcare, and so much more. Those advantages would immediately disappear if we allow lapses in our research security to occur.

The NSF currently owns 17 ships that make up the Academic Research Fleet. This fleet enables scientists across the Nation to conduct complex research on the ocean, the sea floor, the Great Lakes, remote polar regions, and throughout our Nation's borders maritime regions.

Unfortunately, this fleet is also aging and has become susceptible to cyber espionage from the CCP. According to The Wall Street Journal, in 2019 the fleet was the largest target to more than two-dozen cybersecurity attacks by the CCP as part of an elaborate scheme to steal research about maritime technology being developed for military use.

Following these attacks, Mr. Speaker, the NSF ordered an independent advisory group to provide recommendations for strengthening the cybersecurity capabilities of the Academic Research Fleet.

The ANCHOR Act implements these recommendations to protect the fleet and is the tool that the taxpayers will fund to make sure that the research they conduct is secure and protected.

We can't afford to wait, and we can't let China continue to rob us of precious American innovations paid for by our constituents.

I thank Chairman LUCAS, again, for his support of my bill, and I urge my colleagues on both sides of the aisle to support it.

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

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

Mr. Speaker, I thank Congressman MIKE GARCIA, Congresswoman STEVENS, and Congresswoman LOFGREN, my colleague from California and the ranking member. This is a good piece of legislation. Let's vote for it.

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

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Oklahoma (Mr. LUCAS) that the House suspend the rules and pass the bill, H.R. 7630, 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.

NEXT GENERATION PIPELINES RESEARCH AND DEVELOPMENT ACT

Mr. LUCAS. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 7073) to improve public-private partnerships and increase Federal research, development, and demonstration related to the evolution of next generation pipeline systems, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 7073

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 "Next Generation Pipelines Research and Development Act".

SEC. 2. DEFINITIONS.

In this Act:

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

(2) ELIGIBLE ENTITY.—The term "eligible entity" means—

(A) an institution of higher education (as such term is defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a))), including historically Black colleges and universities (within the meaning of the term "part B institution" in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061)), Tribal colleges and universities (as such term is defined in section 316 of the Higher Education Act of 1965 (20 U.S.C. 1059c)), and minority serving institutions (including the entities described in any of paragraphs (1) through (7) of section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)));

(B) a nonprofit research organization;

(C) a National Laboratory (as such term is defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801));

(D) a private commercial entity;

(E) a partnership or consortium of two or more entities described in subparagraphs (A) through (D) that leverages existing Department efforts; or

(F) any other entity the Secretary determines appropriate.

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

(4) TECHNICAL STANDARDS.—The term "technical standard" has the meaning given such term in section 12(d)(5) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note).

SEC. 3. COORDINATION.

In carrying out this Act—

(1) the Secretary shall avoid unnecessary duplication and achieve shared mission goals by coordinating with the Administrator of the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation and across all relevant program offices at the Department of Energy, including—

(A) the Office of Science;

(B) the Office of Fossil Energy and Carbon Management;

(C) the Office of Energy Efficiency and Renewable Energy;

(D) the Office of Cybersecurity, Energy Security, and Emergency Response;

(E) the Advanced Research Projects Agency-Energy;

(F) the Office of Clean Energy Demonstrations; and

(G) any other cross-cutting program office determined appropriate;

(2) the Secretary of Transportation shall ensure participation of and coordination with the Secretary of Energy of—

(A) the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation; and

(B) any other program office of the Department of Transportation determined appropriate; and

(3) the Secretary shall coordinate with the Director of the National Institute of Standards and Technology, the Secretary of the Interior, and the heads of other relevant Federal agencies, as appropriate.

SEC. 4. ADVANCED PIPELINE MATERIALS AND TECHNOLOGIES DEMONSTRATION INITIATIVE.

(a) IN GENERAL.—Subtitle E of title III of division D of the Infrastructure Investment and Jobs Act (Public Law 117-58) is amended by adding at the end the following new section:

"SEC. 40344. ADVANCED PIPELINE MATERIALS AND TECHNOLOGIES DEMONSTRATION INITIATIVE.

"(a) ESTABLISHMENT OF INITIATIVE.—The Secretary shall establish a demonstration initiative (in this section referred to as the 'Initiative') under which the Secretary, through a competitive merit review process, shall award financial assistance to eligible entities to carry out demonstration projects on low- to mid-technology readiness level subjects to achieve deployment of technologies that—

"(1) are applicable to pipelines and associated infrastructure, including liquefied natural gas facilities and underground and above ground gas and liquid fuel storage facilities; and

"(2) involve the development of next generation pipeline systems, components, and related technologies.

"(b) DEMONSTRATION PROJECT FOCUS AREAS.—In carrying out the Initiative, the Secretary shall select demonstration

projects that best advance research undertaken by the Department and the Department of Transportation and incorporate a range of technology focus areas, which may include the following:

“(1) Advanced leak detection and mitigation tools and technologies.

“(2) Novel materials, including alloy and nonmetallic materials, to improve integrity for new and existing pipelines, such as pipeline coatings, sleeves, and liners, and corrosion resistant materials, including maximum and minimum flow rates and immunity to electrical discharge processes.

“(3) Technologies and methods for retrofitting existing pipelines, resolving material compatibility issues, and minimizing leakage, such as field protective coatings and material treatment.

“(4) Advanced manufacturing approaches for producing, fitting, and coupling pipelines, including the fabrication of higher performance pipeline materials and new extrusion technologies or methods to join ultrahigh strength and corrosion resistant materials at a scale for distribution.

“(5) Advanced sensor technologies and processes that enable real-time or in situ monitoring of pipeline assets to assess and mitigate leaks, both internal and external to the pipeline, which may include the following:

“(A) Wireless sensors, such as surface acoustic wave sensors.

“(B) Advanced and cost-effective electrochemical sensors.

“(C) Distributed fiber optic sensors.

“(D) Autonomous sensor systems, including uncrewed aircraft.

“(E) Optical methods.

“(F) Multi-use platforms for diverse sources.

“(G) Hybrid data-analysis platforms.

“(6) Advanced computational, data analytics, and machine learning models to achieve the following:

“(A) Multiscale modeling, characterization, and optimization of transmission and distribution systems and components to aid in planning for optimized and resilient infrastructure.

“(B) Correlation between sensor and emissions data at all operational points and across a variety of scales to assure system integrity spanning large areas.

“(C) Accurate material lifecycle predictions and simulation platforms to forecast pipeline health.

“(D) Secure real time autonomous monitoring and repair capabilities.

“(E) Mapping and monitoring of structural health parameters, such as corrosion.

“(7) Self-healing and self-repair functionalities, including by chemical treatment methods.

“(8) Autonomous robotic and patch technologies for inspection and repair.

“(9) Dynamic compressor technologies, including retrofit kits for existing compressor systems.

“(10) Strategies and technologies for integrated cybersecurity considerations and countering cyberattacks.

“(11) Technologies and methods to reduce potential environmental impacts, including at the atmospheric and subsurface level, associated with pipelines, liquefied natural gas facilities, and gas and liquid fuel storage facilities, such as equipment failure.

“(12) Tools to evaluate geographical pipeline data for the feasibility of repurposing existing infrastructure for safe and effective transport and use of alternative fuels, blends, and carbon dioxide.

“(13) Tools and technologies applicable to improving the safety, operation, and efficiency of liquefied natural gas facilities and gas and liquid fuel storage facilities.

“(c) SELECTION REQUIREMENTS.—In selecting eligible entities for demonstration projects under the Initiative, the Secretary shall, to the maximum extent practicable, take the following actions:

“(1) Encourage regional diversity among eligible entities, including participation by such entities located in rural States.

“(2) Prioritize technological diversity among eligible entities.

“(3) Prioritize a diverse mix of energy, substances, fuel sources, and byproducts, including the following:

“(A) Gas and liquid hydrocarbons, including natural gas, renewable natural gas, methane, ethane, and liquefied natural gas.

“(B) Carbon dioxide.

“(C) Hydrogen.

“(D) Biofuels.

“(E) Water.

“(F) Substances in the hydrogen supply chain, including ammonia and liquid organic hydrogen carriers.

“(G) Blends of gases or liquids, including hydrogen blends.

“(H) Any other source the Secretary determines appropriate.

“(4) Prioritize projects that leverage and are complementary to existing energy infrastructure.

“(5) Prioritize projects that leverage matching funds from non-Federal sources.

“(6) Ensure that selected projects are coordinated with or expand on the existing technology demonstration programs of the Department.

“(7) Evaluate projects and topics for technical performance and economic feasibility as part of lifecycle assessments for return on investment impact.

“(8) Prioritize projects that can quantifiably reduce the environmental impacts of pipelines and associated infrastructure on air, water, or soil quality in all regions of the United States, especially in underserved and rural communities.

“(d) LOCATION.—To the maximum extent practicable, demonstration projects under the Initiative shall be located on sites with existing research infrastructure or with the ability to coordinate with existing Department user facilities and research centers.

“(e) AUTHORIZATION OF APPROPRIATIONS.—Out of funds authorized to be appropriated for—

“(1) the Office of Energy Efficiency and Renewable Energy, and

“(2) the Office of Fossil Energy and Carbon Management,

pursuant to paragraphs (1) and (6), respectively, of section 10771 of subtitle O of title VI of the Research and Development, Competition, and Innovation Act (enacted as division B of Public Law 117-167), there is authorized to be appropriated to the Secretary of Energy to carry out this section \$45,000,000 for fiscal year 2025, and \$50,000,000 for each of fiscal years 2026 through 2029.

“(f) SUNSET.—This section shall terminate five years after the date of the enactment of this section.”.

(b) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Infrastructure Investment and Jobs Act is amended by inserting after the item relating to section 40343 the following new item:

“Sec. 40344. Advanced pipeline materials and technologies demonstration initiative.”.

SEC. 5. JOINT RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—Subject to the availability of appropriations, the Secretary, in consultation with the Secretary of Transportation and the Director of the National Institute of Standards and Technology, and in coordination with the demonstration initiative

established pursuant to section 40344 of the Infrastructure Investment and Jobs Act (Public Law 117-58), as added by section 4, shall establish within the Department a joint research and development program (referred to in this Act as the “Joint Program”) to carry out research projects that—

(1) develop cost-effective advanced materials and technologies for pipeline transportation systems at different scales;

(2) enable the commercialization of innovative materials and technologies for pipeline transportation systems;

(3) support the development of technical standards of innovative materials and technologies for pipeline transportation systems; and

(4) are at a low technology readiness level and not pursued by the Pipeline Safety Research Program of the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation.

(b) MEMORANDUM OF UNDERSTANDING.—Not later than one year after the date of the enactment of this Act, the Secretary shall enter into or update an existing memorandum of understanding with the Secretary of Transportation and the Director of the National Institute of Standards and Technology to administer the Joint Program. Such memorandum shall require each participating agency to—

(1) identify unique research capabilities to contribute while avoiding duplication of existing efforts; and

(2) include cost sharing and cost reimbursement abilities among participating agencies, including any reviews, approvals, trainings, or resource outlays that will be required.

(c) INFRASTRUCTURE.—In carrying out the Joint Program, the Secretary, the Secretary of Transportation, and the Director of the National Institute of Standards and Technology shall—

(1) use existing research infrastructure at—

(A) Department of Energy facilities, including National Laboratories;

(B) Department of Transportation initiatives, including any such initiatives carried out through the Pipeline and Hazardous Materials Safety Administration; and

(C) the National Institute of Standards and Technology; and

(2) develop new infrastructure for potential projects, if appropriate.

(d) GOALS AND METRICS.—The Secretary, the Secretary of Transportation, and the Director of the National Institute of Standards and Technology shall develop goals and metrics for each agency in meeting technological progress under the Joint Program, consistent with existing United States energy safety, resilience, and security policies.

(e) SELECTION OF PROJECTS.—To the maximum extent practicable, the Secretary, the Secretary of Transportation, and the Director of the National Institute of Standards and Technology shall ensure the following with respect to the Joint Program:

(1) Projects are carried out under conditions that represent a variety of geographies, physical conditions, and market constraints.

(2) Projects represent an appropriate balance of the following:

(A) Larger, higher-cost projects.

(B) Smaller, lower-cost projects.

(3) To the maximum extent practicable, projects are transferred between participating agencies based on the stage of research and capabilities of each agency.

(f) PRIORITY.—In carrying out the Joint Program, the Secretary, the Director of the National Institute of Standards and Technology, and the Secretary of Transportation shall, through consultation with the demonstration initiative established pursuant to

section 40344 of the Infrastructure Investment and Jobs Act (Public Law 117-58), as added by section 4, to identify and advance areas of research most needed for demonstration projects under such demonstration initiative, give priority to research and demonstration projects that—

(1) are likely to be of value to such demonstration initiative; and

(2) are done in coordination with, or advance knowledge critical to, the National Pipeline Modernization Center established pursuant to section 6.

(g) **RELATION TO EXISTING LAW.**—Nothing in this section may be construed to change existing agency roles, responsibilities, or areas of expertise as described in section 12 of the Pipeline Safety Improvement Act of 2002 (Public Law 107-355; 49 U.S.C. 60101 note).

(h) **SUNSET.**—This section shall terminate five years after the date of the enactment of this section.

SEC. 6. NATIONAL PIPELINE MODERNIZATION CENTER.

(a) **IN GENERAL.**—In carrying out the demonstration initiative established pursuant to section 40344 of the Infrastructure Investment and Jobs Act (Public Law 117-58), as added by section 4, and the Joint Program and subject to the availability of appropriations, the Secretary shall establish a National Pipeline Modernization Center (referred to in this Act as the “Center”), which shall focus on collaborating with industry and stakeholders to coordinate and carry out research, development, and demonstration projects focused on commercializing cost-effective products and procedures aligned with the goals and priorities set forth by the Department.

(b) **SELECTION.**—The Secretary shall administer the Center in conjunction with an eligible entity pursuant to an agreement between the Department and such entity. Such entity shall be selected on a competitive, merit-reviewed basis.

(c) **EXISTING CENTERS.**—In administering the Center, the Secretary shall prioritize higher education energy-related research centers in existence as of the date of the enactment of this Act.

(d) **PERIOD OF PERFORMANCE.**—An agreement under subsection (b) shall be for a period of not more than five years, subject to the availability of appropriations.

(e) **LOCATION.**—The Center shall be located in proximity to critical transportation infrastructure connecting to an existing national pipeline transportation system and other Department monitoring assets, as determined by the Secretary.

(f) **COORDINATION WITH TRAINING AND QUALIFICATIONS CENTER.**—In carrying out the functions described in subsection (a), the Center shall coordinate and collaborate with training centers of the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation to facilitate knowledge sharing among, and enhanced training opportunities for, Federal and State pipeline safety inspectors and investigators.

(g) **DUPLICATION.**—The Secretary shall ensure the coordination of, and avoid unnecessary duplication of, the activities under this section with the National Center of Excellence for Liquefied Natural Gas Safety established pursuant to section 111 of the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020 (49 U.S.C. 60103 note; Public Law 116-260, div. R, title I).

SEC. 7. NIST PIPELINE METROLOGY.

(a) **IN GENERAL.**—Subject to the availability of appropriations, the Director of the National Institute of Standards and Technology shall carry out a program of measurement research, development, demonstration, and standardization to—

(1) ensure the integrity of pipeline facilities; and

(2) support pipeline safety, security, efficiency, sustainability, and resilience.

(b) **TESTING.**—The Director of the National Institute of Standards and Technology, in collaboration with the Secretary of the Department of Transportation and in consultation with the private sector and international standards organizations, shall support testing, evaluation, and research infrastructure to support the activities described in subsection (a).

(c) **ALLOCATION OF APPROPRIATIONS.**—From amounts appropriated or otherwise made available for the National Institute of Standards and Technology, the Director of the National Institute of Standards and Technology shall allocate up to \$2,500,000 for each of fiscal years 2025 through 2029 to carry out this section.

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

(a) **IN GENERAL.**—Out of funds authorized to be appropriated for the Office of Energy Efficiency and Renewable Energy and the Office of Fossil Energy and Carbon Management pursuant to paragraphs (1) and (6), respectively, of section 10771 of subtitle O of title VI of the Research and Development, Competition, and Innovation Act (enacted as division B of Public Law 117-167), there is authorized to be appropriated to the Secretary to carry out—

(1) section 5, \$20,000,000 for fiscal year 2025, and \$30,000,000 for each of fiscal years 2026 through 2029; and

(2) section 6, \$10,000,000 for fiscal year 2025, and \$15,000,000 for each of fiscal years 2026 through 2029.

(b) **OFFSET.**—Section 10771 of subtitle O of title VI of the Research and Development, Competition, and Innovation Act (enacted as division B of Public Law 117-167) is amended—

(1) in paragraph (1)—

(A) in the matter preceding subparagraph (A), by striking “2026” and inserting “2029”; and

(B) in subparagraph (B), by striking “1,200,000,000” and inserting “\$1,100,000,000”; and

(2) in subsection (6)—

(A) in the matter preceding subparagraph (A), by striking “2026” and inserting “2029”; and

(B) in subparagraph (A), by striking “600,000,000” and inserting “\$445,000,000”; and

(C) in subparagraph (B)—

(i) by striking “200,000,000” and inserting “\$100,000,000”; and

(ii) by striking “and” after the semicolon;

(D) in subparagraph (C)—

(i) by striking “1,000,000,000” and inserting “\$900,000,000”; and

(ii) by striking the period and inserting “; and”;

(E) by adding at the end the following new subparagraph:

“(D) \$455,000,000 to carry out pipeline research, development, demonstration, and commercial application activities.”

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

The Chair recognizes the gentleman from Oklahoma.

GENERAL LEAVE

Mr. LUCAS. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to revise and extend their remarks and include extraneous material in the RECORD on the bill now under consideration.

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

There was no objection.

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

Mr. Speaker, I rise in support of H.R. 7073, the Next Generation Pipelines Research and Development Act, which I am proud to cosponsor.

The United States pipeline network consists of nearly 2.8 million miles of pipeline, enough to wrap around the world at the equator more than 112 times.

Yet, 50 percent of the Nation’s pipeline system is more than 60 years old, and the Department of Energy estimates that as many as 96,000 miles of new pipeline will be needed to handle carbon dioxide capture from power plants and directly from the air.

As the Representative of Cushing, Oklahoma, the pipeline crossroads of the world, I see firsthand the importance of pipeline infrastructure, not just for our energy security but for economic growth in America. This is infrastructure that must be maintained now and well into the future.

A new and modern emphasis on science collaboration, as well as increased industry involvement and public-private demonstration projects, will be required to meet our future energy demands and ensure the continued safety and efficient use of our pipelines.

Not only do pipelines carry the oil and natural gas that currently fuel our economy, but they are also critical in transporting the next generation of fuels like hydrogen, carbon dioxide, and methane.

H.R. 7073 enables that by invigorating Federal research focused on improving pipeline safety and technology.

The bill establishes a demonstration initiative to advance research undertaken by DOE and the Pipeline and Hazardous Materials Safety Administration. It will also help lab-scale, basic research overcome the “valley of death” through commercial development.

It also establishes a national pipeline modernization center as a central location for industry and stakeholders to collaborate with Federal agencies on pipeline research and development and enable new cost-effective products and procedures.

Simply put, 7073 is necessary for the continued growth of the American energy industry. It will strengthen pipeline infrastructure networks that will be essential to achieving our shared energy, economic, security, and environmental goals.

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

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND
INFRASTRUCTURE,

Washington, DC, September 19, 2024.

Hon. FRANK D. LUCAS,
Chairman, Committee on Science, Space, and
Technology,

House of Representatives, Washington, DC.

DEAR CHAIRMAN LUCAS: I write to you concerning H.R. 7073, the Next Generation Pipelines Research and Development Act. The bill was referred primarily to the Committee on Science, Space, and Technology. Specifically, provisions of H.R. 7073 fall within the Rule X jurisdiction of the Committee on Transportation and Infrastructure.

I recognize and appreciate your desire to bring this legislation before the House of Representatives in an expeditious manner, and accordingly, the Committee on Transportation and Infrastructure will forgo action on the bill. However, this is conditional on our mutual understanding that doing so will not prejudice the Committee on Transportation and Infrastructure with respect to the appointment of conferees or to any future jurisdictional claim over the subject matter contained within the bill or similar legislation that falls under the Committee on Transportation and Infrastructure's Rule X jurisdiction. Further, should a conference on the bill be necessary, I appreciate your agreement to support my request to have the Committee represented on the conference committee.

Finally, I would ask that a copy of this letter and your response acknowledging our jurisdictional interest in the bill be included in the Committee Report and *Congressional Record* during consideration of H.R. 7073 on the House floor.

Sincerely,

SAM GRAVES,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND
TECHNOLOGY,

Washington, DC, September 19, 2024.

Hon. SAM GRAVES,
Chairman, Committee on Transportation and
Infrastructure,

House of Representatives, Washington, DC.

DEAR CHAIRMAN GRAVES: I am writing concerning H.R. 7073, the Next Generation Pipelines Research and Development Act, which was introduced on January 22, 2024, and solely referred to the Committee on Science, Space, and Technology.

I appreciate you agreeing to withdraw your request for a sequential referral of H.R. 7073, so that the bill may be considered expeditiously. I acknowledge that forgoing your referral claim now does not waive the right to jurisdictional claims in the future on subject matter contained in this bill or similar legislation. Further, I will appropriately consult and involve the Committee on Transportation and Infrastructure as the bill moves forward on issues that fall within your Rule X jurisdiction. In addition, should a conference on the bill be necessary, I would support your request to have the Committee on Transportation and Infrastructure represented on the conference committee.

Finally, I will include of copy of our letter exchange in the Committee Report and the *Congressional Record* when the bill is considered on the House floor.

Sincerely,

FRANK D. LUCAS,
Chairman.

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

Mr. Speaker, I rise in support of the Next Generation Pipelines Research and Development Act.

As has been mentioned, a majority of the Nation's pipeline system is more than 60 years old. With this magnitude of aging pipelines operating 24 hours a day, 7 days a week, it is inevitable that without new inspection and leak detection technologies, catastrophic defects and anomalies will occur more frequently.

Too often we are confronted with news of pipeline failures that cause mass casualties, environmental disasters, damage property, and service interruptions for thousands. There is much that industry can do to secure their assets while contributing to the development of next generation pipelines.

H.R. 7073 seeks to prevent future infrastructure failure and improve pipeline safety and technology through innovation. This bill will improve the work of the DOE and the Department of Transportation's Pipeline and Hazardous Materials Safety Administration by establishing a demonstration initiative that will help lab-scale, basic research overcome the "valley of death" and achieve commercial deployment. DOE, DOT, and NIST will also be empowered to work together in a joint pipeline research program.

Finally, it directs DOE to establish a national pipeline modernization center, a place for industry and Federal agencies to collaborate on pipeline research and development.

□ 1945

What we have in front of us is much-needed harm reduction legislation. I extend my congratulations to Mr. WEBER and Dr. CARAVEO and my appreciation for their hard work on this legislation. It is a good bill. I support it, and I encourage others, as well, to support it.

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

Mr. LUCAS. Mr. Speaker, I yield such time as he may consume to the gentleman from Texas (Mr. WEBER) to speak on his bill.

Mr. WEBER of Texas. Mr. Speaker, I rise in support of my bill, H.R. 7073, the Next Generation Pipelines Research and Development Act.

I introduced this important piece of legislation earlier this year to direct the Department of Energy toward a new and more modern approach to pipeline research and development.

The chairman talked about over 2 million something miles of pipelines in the United States. Well, I am from the great State of Texas, which has over half a million miles of gas and liquid pipelines, so that is about a fourth of the whole pipelines in the United States if my high school math is holding up. This creates \$374 billion, with a b, in total economic output for my State.

That is because pipelines deliver oil and gas safely, reliably, and efficiently. However, as the chairman mentioned, half of all U.S. pipelines are over 60 years old, so we can expect defects and

anomalies to occur more often. It is just a fact of the wear and tear they are under. Imagine driving a car that was over 60 years old, and yet it had never been tended to, which is unbelievable.

Now, that is not to say that pipelines are dangerous, Mr. Speaker. Actually, the truth is quite the opposite, as pipelines safely deliver oil and gas without incident—check these numbers out—24/7, 99.999 percent of the time. That is a pretty good safety record, Mr. Speaker.

As new energy sources emerge, like hydrogen, carbon dioxide, and methane, we can expect pipelines to be the primary source of transportation to American energy independence into the future.

H.R. 7073 encourages new public-private projects in maintenance of our current pipeline infrastructure, and in supporting next-generation systems. Through the technological innovation directed by this legislation, the American energy sector will actually see a strengthened focus on material behavior, leak detection capabilities, and multifuel transportation.

The Next Generation Pipeline R&D Act also brings together industry stakeholders, academia, and Federal agencies to collaborate and coordinate on vital pipeline research needs. It ensures that the Department of Energy focuses on basic research that is actually too low on the technology readiness level for industry to conduct. At the same time, this bill enables industry to be involved and ready to run with the innovation that does come from that kind of research.

Lastly, this bill codifies and updates a multiagency research program that includes the Department of Energy, the National Institute of Standards and Technology, and the Department of Transportation. This language updates and builds upon the original memorandum of understanding that was put in place way back in 2004.

H.R. 7073 is a good government bill with bipartisan support, as you have heard here tonight. It strengthens U.S. leadership in oil and natural gas research and actually provides a good return on investment for the American taxpayer. I thank Representatives CARAVEO and OBERNOLTE, as well as Chairman LUCAS and our ranking member across the aisle for cosponsoring and being great partners on this bill. I urge all of my colleagues to support it.

Ms. LOFGREN. Mr. Speaker, we are fortunate, indeed, to have Dr. CARAVEO as a Member of our House with her keen intellect and pragmatic approach to solving America's problems.

I yield such time as she may consume to the gentlewoman from Colorado (Ms. CARAVEO).

Ms. CARAVEO. Mr. Speaker, I thank Ranking Member LOFGREN for yielding.

Mr. Speaker, in Colorado we know how critical pipelines are, whether

they are for carrying different types of energy sources or even delivering water to communities from places that are miles away. In fact, according to the Office of Pipeline Safety, there are more than 45,000 miles of pipeline in Colorado.

As one of the leading energy producers in the country, my district is home to miles of oil and hazardous liquid lines and natural gas transmission lines. However, we are also no stranger to experiencing accidents like a leak or break. We need to be doing what we can to ensure this important piece of our energy infrastructure remains safe and effective for years to come.

That is why I am proud to lead the Next Generation Pipeline Research and Development Act with Representative WEBER, which would invest in R&D for our aging pipeline infrastructure while also leveraging public-private partnerships to do so. This bipartisan effort will be a win for keeping our environment clean while maintaining one of the primary conduits for bringing energy to Coloradans.

One of the biggest issues in my district right now is that our pipelines are getting older, particularly those used to transport natural gas, and that makes them more prone to leak. The most prevalent leak we see is methane, which is a more potent greenhouse gas than carbon dioxide. Just one leak can be damaging to the environment, so we need to be making these investments now to secure our pipeline infrastructure. This will also be important as we begin to use pipelines not just for traditional energy sources like natural gas, but for newer sources like hydrogen. The future of our energy grid will rely on a mix of different fuels, and securing our pipeline infrastructure is vital to that future.

Before I close, I will highlight how this bill will help those of us living in the West. As drought continues to affect places like Colorado, water sources are becoming more important to access, especially to keep up with growth. There are plenty of cities in Colorado, including in my district, that rely on pipelines to bring water to consumers, and there is no sign of this stopping. We need to ensure these pipelines are maintained with up-to-date technology, and this bill will make certain of that.

I again thank Representative WEBER for working with me on this bill and for the leadership both Chairman LUCAS and Ranking Member LOFGREN have shown on the Science Committee. Mr. Speaker, I urge my colleagues to support this effort.

Mr. LUCAS. Mr. Speaker, I have no further requests for time, and I am prepared to close once the gentlewoman from California closes.

Ms. LOFGREN. Mr. Speaker, I urge that we support and enact this good bill, and I yield back the balance of my time.

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

thank my Science Committee colleagues, Mr. WEBER and Ms. CARAVEO, for leading this bipartisan effort. I urge all my colleagues to support this legislation, and I yield back the balance of my time, Mr. Speaker.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Oklahoma (Mr. LUCAS) that the House suspend the rules and pass the bill, H.R. 7073, as amended.

The question was taken.

The SPEAKER pro tempore. In the opinion of the Chair, two-thirds being in the affirmative, the ayes have it.

Mr. LUCAS. Mr. Speaker, on that I demand the yeas and nays.

The yeas and nays were ordered.

The SPEAKER pro tempore. Pursuant to clause 8 of rule XX, further proceedings on this motion will be postponed.

INNOVATIVE MITIGATION PARTNERSHIPS FOR ASPHALT AND CONCRETE TECHNOLOGIES ACT

Mr. LUCAS. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 7685) to strengthen and enhance the competitiveness of American industry through the research and development of advanced technologies to improve the efficiency of cement, concrete, and asphalt production, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 7685

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 “Innovative Mitigation Partnerships for Asphalt and Concrete Technologies Act” or the “IMPACT Act”.

SEC. 2. ADVANCED CEMENT, CONCRETE, AND ASPHALT PRODUCTION RESEARCH PROGRAM.

(a) PROGRAM.—Part I of subtitle C of title V of the Infrastructure Investment and Jobs Act (Public Law 117–58) is amended by inserting after section 40522 the following new section:

“SEC. 40523. ADVANCED CEMENT, CONCRETE, AND ASPHALT PRODUCTION RESEARCH PROGRAM.

“(a) DEFINITIONS.—In this section:

“(1) ADVANCED PRODUCTION.—The term ‘advanced production’ means production of cement, concrete, or asphalt with one or more of the following improvements with respect to the production of commercially available cement, concrete, or asphalt:

“(A) Improved cost-effectiveness.

“(B) Improved quality, durability, engineering performance, and resilience.

“(C) Improved efficiency of resource consumption and material demand.

“(2) ALTERNATIVE FUELS.—The term ‘alternative fuels’ means any solid, liquid, or gaseous materials, or a combination thereof, used to replace or supplement any portion of fuels used in combustion or pyrolysis for low-emissions cement, concrete, or asphalt.

“(3) COMMERCIALLY AVAILABLE.—The term ‘commercially available’, with respect to cement, concrete, and asphalt, means that the cement, concrete, or asphalt is—

“(A) readily and widely available for purchase in the United States; and

“(B) produced using a production method of cement, concrete, or asphalt products, as applicable, that is widely in use.

“(4) ELIGIBLE ENTITY.—The term ‘eligible entity’ means any of the following:

“(A) An institution of higher education.

“(B) An appropriate State or Federal entity, including a federally funded research and development center of the Department.

“(C) A nonprofit research institution.

“(D) A private entity.

“(E) Any other relevant entity the Secretary determines appropriate.

“(F) A partnership or consortium of two or more entities described in subparagraphs (A) through (E).

“(5) ENGINEERING PERFORMANCE-BASED STANDARD.—The term ‘engineering performance-based standard’ means an existing engineering standard with respect to which the requirements applicable to such standard are stated in terms of required results, with criteria for verifying compliance rather than specific composition, design, or procedure.

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

“(7) LOW-EMISSIONS CEMENT, CONCRETE, AND ASPHALT.—The term ‘low-emissions cement, concrete, and asphalt’ means cement, concrete, asphalt binder, or asphalt mixture that reduces, to the maximum extent practicable, greenhouse gas or directly-related copollutant emissions to levels below commercially available cement, concrete, or asphalt.

“(8) RURAL AREA.—The term ‘rural area’ has the meaning given such term in section 343(a) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)).

“(b) ESTABLISHMENT.—Not later than 180 days after the date of the enactment of this section, the Secretary shall establish a program of research, development, demonstration, and commercial application of advanced tools, technologies, and methods for advanced production and use of low-emissions cement, concrete, and asphalt in order to—

“(1) increase the technological and economic competitiveness of industry and production in the United States;

“(2) expand and increase the stability of supply chains through enhanced domestic production, nearshoring, and cooperation with allies;

“(3) achieve measurable greenhouse gas or directly related copollutant emissions reductions in the production processes for cement, concrete, and asphalt products; and

“(4) create quality domestic jobs.

“(c) REQUIREMENTS.—In carrying out the program under subsection (b), the Secretary shall—

“(1) coordinate with the programs and activities authorized under title VI of division Z of the Consolidated Appropriations Act, 2021 (relating to industrial and manufacturing technologies) and the amendments made by such title;

“(2) coordinate across all relevant program offices of the Department, including the Office of Science, the Advanced Research Projects Agency-Energy, the Office of Clean Energy Demonstrations, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, the Office of Industrial Efficiency and Decarbonization, the Office of Manufacturing and Energy Supply Chains, and the Office of Nuclear Energy;

“(3) leverage, to the extent practicable, the research infrastructure of the Department, including scientific computing user facilities, x-ray light sources, neutron scattering facilities, and nanoscale science research centers; and