

Madam Speaker, I urge my colleagues to support this bill, and I yield back the balance of my time.

Mr. BURLISON. Madam Speaker, I urge my colleagues to support this important whistleblower reform bill, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Missouri (Mr. BURLISON) that the House suspend the rules and pass the bill, H.R. 5578, 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.

□ 1720

NUCLEIC ACID STANDARDS FOR BIOSECURITY ACT

Mr. BABIN. Madam Speaker, I move to suspend the rules and pass the bill (H.R. 3029) to amend the Research and Development, Competition, and Innovation Act to support nucleic acid screening, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 3029

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 “Nucleic Acid Standards for Biosecurity Act”.

SEC. 2. SUPPORTING NUCLEIC ACID SCREENING.

Section 10221 of the Research and Development, Competition, and Innovation Act (42 U.S.C. 18931; enacted as part of title II of division B of Public Law 117-167) is amended—

(1) in subsection (a)(1)—

(A) in subparagraph (C), by striking “and” after the semicolon;

(B) by redesignating subparagraph (D) as subparagraph (E); and

(C) by inserting after subparagraph (C) the following new subparagraph:

“(D) best practices, guidelines, and technical standards for risk management associated with engineering biology and biomanufacturing, including risks associated with the use of artificial intelligence; and”;

(2) by redesignating subsections (b) and (c) as subsections (c) and (d), respectively; and

(3) by inserting after subsection (a) the following new subsection:

“(b) NUCLEIC ACID SYNTHESIS SCREENING TOOLS AND STANDARDS.—

“(1) IN GENERAL.—The Director, in consultation with heads of Federal agencies the Director considers appropriate, shall carry out measurement research to support the development and improvement of best practices and technical standards for biosecurity measures related to nucleic acid synthesis, including the following:

“(A) Testing to improve the accuracy, efficacy, and reliability of screening for nucleic acid synthesis.

“(B) Best practices, including security and access controls, for operational security and managing sequence-of-concern databases to support such screening.

“(C) Technical implementation guidance to ensure such screening is effective and secure.

“(D) Conformity-assessment best practices and technical standards.

“(E) Methods to evaluate the impact and effectiveness of the implementation of subparagraphs (A) through (D).

“(2) CONSORTIUM.—In carrying out this subsection, the Director shall convene a consortium of stakeholders, including industry, institutions of higher education, nonprofit organizations, and customers to carry out the following:

“(A) Develop and periodically update consensus priorities and best practices, as appropriate, for synthetic nucleic acid procurement screening mechanisms.

“(B) Develop roadmaps to inform the activities carried out under paragraph (1).

“(3) REPORT.—Not later than 18 months after the first meeting of the consortium under paragraph (2), the Director shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report summarizing the findings of the consortium.

“(4) AUTHORIZATION OF APPROPRIATIONS.—Of the funds authorized to be appropriated for the National Institute of Standards and Technology pursuant to this section for scientific and technical research and services laboratory activities, there is authorized to be appropriated \$5,000,000 for each of fiscal years 2027 through 2031 to carry out this subsection.”.

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

The Chair recognizes the gentleman from Texas.

GENERAL LEAVE

Mr. BABIN. Madam Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 3029, the bill now under consideration.

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

There was no objection.

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

Madam Speaker, I rise in support of H.R. 3029, the Nucleic Acid Standards for Biosecurity Act, introduced by Representative SALINAS of Oregon, along with Representative MCCORMICK of Georgia.

This bill is about protecting two things we all care about: American leadership in the life sciences and the security of the American people.

Today, an American company or university laboratory can legally order made-to-order DNA, the basic building blocks of biology, and have it delivered in a matter of days. This technology powers new medicines and vaccines, stronger crops, and advanced manufacturing. It is a real source of American strength.

However, the same technology that lets us build the biology of the future could, in the wrong hands, potentially be used to assemble the genetic material of a dangerous pathogen.

Responsible providers already guard against this. They screen incoming orders against sequences of concern and verify the identities of their customers.

However, as this field continues to advance rapidly, the lack of common technical standards and best practices for screening presents an emerging biosecurity risk.

That is exactly the kind of work the National Institute of Standards and Technology, NIST, was built to do. NIST is our Nation's measurement and standards laboratory. It does not regulate industry. It provides industry with the tools and benchmarks and the best practices needed to get this right.

H.R. 3029 directs NIST to carry out the measurement research needed to make this screening more accurate and reliable by improving screening tools, securing databases of concerning sequences, and developing ways for providers to demonstrate that their screening systems work as intended.

It also directs NIST to convene a consortium of the people who actually do this work, including industry, universities, and nonprofit organizations, to develop consensus best practices and a roadmap for the future.

This legislation does not create a new regulatory regime for American biotechnology. It strengthens our biosecurity while safeguarding the innovation that keeps us ahead of our competitors, and it passed the House Science, Space, and Technology Committee on a bipartisan basis.

I thank Representatives SALINAS and MCCORMICK for their work on this bill, I urge my colleagues to support it, and I reserve the balance of my time.

Ms. SALINAS. Madam Speaker, I yield myself the balance of my time.

Madam Speaker, American biotech companies are leading a scientific revolution that is transforming our economy. In recent years, we have seen breakthroughs that have delivered promising new treatments for Alzheimer's, new biological alternatives to pesticides, and plastic-eating bacteria, just to name a few.

These innovations are making Americans healthier, driving a more sustainable economy, and supporting good jobs. However, while America leads the world in these emerging technologies, our competitors are close behind. If we want to ensure American industry stays on top, then American consumers must have confidence in the safety and reliability of our advancements.

One of the key ways American companies produce these breakthroughs is by producing synthetic nucleic acids, like DNA and RNA, for use in biotech research. These are an important tool though that allows scientists to study gene function, develop novel vaccines, improve diagnostic tests, and pursue countless other life-changing discoveries. Companies like Twist Bioscience in my district are pushing the envelope to accelerate and scale-up production, which, in turn, will facilitate faster discoveries.

As this field advances, particularly with the development of AI systems to design nucleic acid sequences, we need to double down on efforts to ensure the

technology is used safely and responsibly.

H.R. 3029, the Nucleic Acid Standards for Biosecurity Act, directs the National Institute of Standards and Technology to carry out measurement research and lead consensus-driven standards development to ensure these tools can be harnessed in a trustworthy manner.

Businesses, small and large, in Oregon and across the country, will benefit from this partnership with NIST. These standards will drive sustainable growth while helping to keep this industry and the good jobs it supports right here in America. Through a commonsense partnership between government and industry, we will unlock responsible and trustworthy growth that benefits industry, workers, and consumers across the economy.

Madam Speaker, in closing, I want to extend my great gratitude to Chairman BABIN and Mr. MCCORMICK for their bipartisan work. I urge my colleagues to vote “yes” on H.R. 3029, and I yield back the balance of my time.

Mr. BABIN. Madam Speaker, H.R. 3029 is a practical, targeted bill. It directs NIST to develop the science-based standards and best practices needed to make the screening of synthetic DNA much more reliable, helping to ensure that the very technology driving American biotechnology cannot be turned against us.

That is why this bill earned bipartisan support in the Science, Space, and Technology Committee and why it deserves the support of the full House today.

Madam Speaker, I urge my colleagues to support H.R. 3029, and I yield back the balance of my time.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Texas (Mr. BABIN) that the House suspend the rules and pass the bill, H.R. 3029, 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 GEOTHERMAL RESEARCH AND DEVELOPMENT ACT

Mr. BABIN. Madam Speaker, I move to suspend the rules and pass the bill (H.R. 8790) to amend the Energy Independence and Security Act of 2007 to direct research, development, demonstration, and commercial application activities in support of next-generation geothermal and closed-loop geothermal systems in various conditions, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 8790

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 Geothermal Research and Development Act”.

SEC. 2. GEOTHERMAL ENERGY.

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 (Public Law 110–140) is amended—

(1) in section 612 (42 U.S.C. 17191; relating to definitions)—

(A) by redesignating paragraphs (1), (2), (3), (4), (5), (6), (7), and (8) as paragraphs (2), (3), (4), (5), (6), (7), (8), and (10), respectively;

(B) by inserting before paragraph (2), as so redesignated, the following new paragraph:

“(1) CLOSED-LOOP GEOTHERMAL SYSTEMS.—The term ‘closed-loop geothermal systems’ means a wellbore or subsurface circuit of wellbores containing a fluid heated through contact with the borehole wall.”;

(C) by inserting after paragraph (8), as so redesignated, the following new paragraph:

“(9) NEXT-GENERATION GEOTHERMAL SYSTEMS.—The term ‘next-generation geothermal systems’ means—

“(A) enhanced geothermal systems;

“(B) closed-loop geothermal systems;

“(C) in supercritical conditions—

“(i) enhanced geothermal systems; or

“(ii) closed-loop geothermal systems; and

“(D) other innovative energy technologies.”; and

(D) by adding at the end the following new paragraph:

“(11) SUPERCRITICAL GEOTHERMAL.—The term ‘supercritical geothermal’ means energy derived from a subsurface rock resource in-situ existing at or above the supercritical conditions, whether relating to temperature or pressure, of the primary fluid present.”;

(2) in section 613(b)(1) (42 U.S.C. 17192(b)(1); relating to hydrothermal research and development), by striking “advanced geologic tools to assist” and inserting “advanced tools, including machine learning algorithms, to assist”;

(3) in section 614 (42 U.S.C. 17193; relating to general geothermal systems research and development)—

(A) in subsection (d)(1), by striking “among the Office of Fossil Energy, the Office of Energy Efficiency and Renewable Energy,” and inserting “across the Department”; and

(B) in subsection (h)—

(i) in paragraph (1), by inserting “and publicly available subsurface data, including data reported as part of fossil fuel and mining operations,” after “geothermal drilling information”; and

(ii) in paragraph (2), by adding at the end the following new subparagraphs:

“(C) UPDATES.—The repository established under paragraph (1) shall be periodically updated in order to carry out the following:

“(i) Standardize data in a uniform manner to the maximum extent practicable and enable analysis across different projects.

“(ii) Enhance the accessibility and usability of data to increase analysis of geothermal energy and next-generation geothermal systems on regional, local, and site-specific scales.

“(iii) Increase uses of data, including data viewable by map and organization by common attributes, such as region.

“(iv) Make other improvements in functionality and usability, as determined by the Secretary.

“(D) MEMORANDUM OF UNDERSTANDING.—

“(i) IN GENERAL.—The Secretary shall enter into a memorandum of understanding with the Secretary of the Interior, and with the heads of other relevant Federal departments, for notifying, sharing, and providing opportunities for additional data collection regarding shared geothermal development

data from projects funded by the Department of the Interior and each such other relevant department, including data from mining, critical minerals, and energy projects, such as subsurface heat data, seismic data, lithology data, boundaries of State and federally protected areas, and existing transmission capacity.

“(ii) PRIORITIZATION.—To the maximum extent practicable, activities conducted pursuant to a memorandum of understanding under clause (i) shall prioritize heat, lithology, and strain profiles through deep exploration boreholes and control points for deep heat mapping and geothermal development.

“(E) REGIONAL DATA PROBES.—The Secretary of the Interior may, in consultation with the Secretary, commission the drilling of supercritical geothermal exploration boreholes in representative geological provinces in the United States to provide control points for deep heat mapping and geothermal development. The resulting data shall include an exploration of heat, lithology, and strain profiles, and shall be shared publicly on the repository established under paragraph (1).

“(F) STUDY ON SITE SELECTION CHARACTERISTICS FOR SUPERCRITICAL GEOTHERMAL.—The Secretary of the Interior shall, in consultation with the Secretary, conduct a study on site selection characteristics in representative geological provinces in the United States, including the United States territories of American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands, for supercritical geothermal.”;

(4) in section 615 (42 U.S.C. 17194; relating to enhanced geothermal systems research and development)—

(A) in the section heading, by striking “**ENHANCED**” and inserting “**NEXT-GENERATION**”;

(B) in subsection (a), by striking “enhanced” and inserting “next-generation”;

(C) in subsection (b)—

(i) in the heading, by inserting “AND CLOSED-LOOP” after “ENHANCED”;

(ii) in the matter preceding paragraph (1), by inserting “and closed-loop” after “enhanced”;

(iii) in paragraph (11), by striking “and” after the semicolon;

(iv) in paragraph (12), by striking the period and inserting “; and”; and

(v) by adding at the end the following new paragraph:

“(13) the research topics specified in subparagraphs (1) through (12) in supercritical conditions.”;

(D) in subsection (c)—

(i) by redesignating paragraph (7) as paragraph (8); and

(ii) by inserting after paragraph (6) the following new paragraph:

“(7) NEXT-GENERATION GEOTHERMAL TESTING.—Not later than one year after the date of the enactment of this paragraph, the Secretary shall take such actions as may be necessary to ensure that at least one FORGE site has the capabilities to include next-generation geothermal testing, including in supercritical conditions.”; and

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

“(e) NEXT-GENERATION GEOTHERMAL RESEARCH AND DEVELOPMENT PROGRAM.—

“(1) IN GENERAL.—Within the Geothermal Technologies Office of the Department, the Secretary shall support a program of next-generation geothermal research, development, demonstration, and commercial application activities, including in supercritical conditions.

“(2) FOCUS AREAS.—

“(A) IN GENERAL.—The program described in paragraph (1) shall focus on the following topics: