

consumers and businesses over \$1 billion since 2007 and has impeded innovation and energy efficiency.

Section 6 of this legislation is a surgical approach that will end this antiquated tech mandate while preserving FCC's authority in the retail set-top box market.

I ask my colleagues on both sides of the aisle to support H.R. 4572 today. It balances the needs of competing stakeholders and most importantly, protecting what's in the best interest of the American people, while reauthorizing must-pass legislation and waiting for a more appropriate vehicle to address our nation's retransmission consent laws and regulations.

Ms. JACKSON LEE. Mr. Speaker, I rise to speak on the STELA.

First, I would like to thank Chairman COBLE and Ranking Member NADLER for holding two Judiciary Committee hearings in the past year where we have examined the laws in the satellite television arena in Title 17 of the United States Code (U.S.C.), and related issues.

The relevant part of STELA expires at the end of the year but I am sure that those in the industry would have us do something before then and preferably before the lame duck session after November.

I would note the inclusion of a provision in this bill which some consumer groups find objectionable because it repeals the integration ban which deprives consumers of choice. This is from the Energy and Commerce Committee—though hopefully it will be worked out before the President signs—because consumers must not be deprived of choices.

And now that the Supreme Court has decided the Aereo case, we have another set of variables on the table.

I mention the Aereo case because it is the seminal case due to its timing but it also reminds us of how ephemeral our work can be in this Committee and this Congress.

Back in 1992 and through all of the other reauthorizations of STELA and the concurrent surge of innovation from the late 1990's until present day—who could have contemplated the existence of an Aereo, HULU, Netflix, or Pandora?

In doing so we are able to take a walk down the memory lane of analog and digital television, the role of cable and satellite providers, vis-à-vis their network partners.

It is useful to note that in the 18th Congressional District my constituents are able to avail themselves of DISH, Comcast, ATT, and even Phonoscope which I believe is one of the oldest in the nation and a Houston, Texas company since 1953.

In looking at these laws, we must note the role of the Copyright Office which released a widely-read report on the Satellite Television Extension and Localism Act in August 2011 as ordered by the last reauthorization, and the GAO report which focused on consumer issues.

Americans from Houston, Texas, Chicago, New York, the Bay Area, and all across this great nation benefit from a broadcast system which consists of the laws which undergird the system, buffeted by the policy and practices by which transmitters, providers, artists, writers, musicians, and other creators of all stripes benefit.

The system stands on principles of balance and fairness which allow for continued innovation while not infringing on the property rights of others.

In my state, I see satellite dishes in urban and rural areas but it seems like a higher percentage of rural homes have DISH or DIRECTV than in the cities and towns. Is that an accurate observation and if so, why?

What is the justification for a 30 foot outdoor rooftop antenna being the standard for measuring whether a home can get a broadcaster over-the-air signal?

Who has 30 foot antennas on their rooftops these days? Can folks even go out and buy those and install them easily?

Shouldn't the standard reflect the consumer realities and be changed to a regular indoor antenna that can be picked up at most electronics stores?

What are the criteria for a household to be considered 'unserved'? Does the current definition of unserved households adequately account for those homes that do not receive over-the-air signals?

This will be the 6th reauthorization of STELA but to my knowledge there has never before been a discussion of these blackouts, because they simply didn't happen in the past like they do today. We've gone from zero blackouts to 12 in 2010 and now 127 in 2013.

Viewers in my state have experienced their fair share of blackouts and I stand with them in saying: we don't like them.

We must all agree that blackouts must stop. The statutory framework for the retransmission of broadcast television signals has been based on a distinction between local and distant signals.

The signals of significantly viewed stations and the signals of in-state, out-of-market stations in the four states that satellite operators were allowed to import into orphan counties under the exceptions in SHVERA, originate outside the market into which they are imported; in that regard, they are distant signals and they have been subject to the Section 119 distant signal statutory copyright license.

Since significantly viewed stations and the "exception" stations can be presumed to be providing programming of local or state-wide interest to counties in particular local markets, arguably that content could be viewed as local to the counties into which they are imported and should be treated accordingly.

STELA modified the Copyright Act to treat those signals as local, moving the relevant provisions from Section 119 to Section 122.

If a broadcaster opts to negotiate a retransmission consent agreement, cable companies are no longer required to broadcast that signal pursuant to the must-carry requirement. Furthermore, if negotiations for retransmission consent fail, cable companies are not permitted to retransmit the broadcast signals that they have not been granted a license to retransmit. This is precisely what has happened in the dispute between Time Warner Cable and CBS Broadcasting.

My concern is that when retransmission consent negotiations fail, consumers often look to the Federal Communications Commission (FCC) to mediate the dispute. However, the FCC actually has very little authority over retransmission consent negotiations. The Communications Act requires that programming be offered on a non-discriminatory basis, and that the negotiations be conducted in good faith.

The FCC has the authority to enforce both of these requirements, but does not appear to have the authority to force the companies to

reach an agreement, or the ability to order the companies to continue to provide programming to consumers who have lost access while the dispute is being resolved. Therefore, as was seen in the debacle that was the TWC-CBS negotiation, unless negotiations are not occurring in "good faith" the FCC has little power over retransmission consent agreements.

STELA clarified that a significantly viewed signal may only be provided in high definition format if the satellite carrier is passing through all of the high definition programming of the corresponding local station in high definition format as well; if the local station is not providing programming in high definition format, then the satellite operator is not restricted from providing the significantly viewed station's signal in high definition format.

Studying What the Impact Would Be If the Statutory Licensing System for Satellite and Cable Retransmission of Distant Broadcast Signals Were Eliminated

The United States Copyright Office has proposed that Congress abolish Sections 111 and 119 of the Copyright Law, arguing that the statutory licensing systems created by these provisions result in lower payments to copyright holders than would be made if compensation were left to market negotiations. According to the Copyright Office, the cable and satellite industries no longer are nascent entities in need of government subsidies, have substantial market power, and are able to negotiate private agreements with copyright owners for programming carried on distant broadcast signals.

Congress must have a role in the broadcasting space but whether that is doing away with compulsory licensing or becoming even more involved is what needs to be discussed.

The SPEAKER pro tempore. The question is on the motion offered by the gentleman from Oregon (Mr. WALDEN) that the House suspend the rules and pass the bill, H.R. 4572, as amended.

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

The title was amended so as to read: "A bill to amend the Communications Act of 1934 and title 17, United States Code, to extend expiring provisions relating to the retransmission of signals of television broadcast stations, and for other purposes."

A motion to reconsider was laid on the table.

□ 1530

SECURING ENERGY CRITICAL ELEMENTS AND AMERICAN JOBS ACT OF 2014

Mr. SMITH of Texas. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 1022) to develop an energy critical elements program, to amend the National Materials and Minerals Policy, Research and Development Act of 1980, and for other purposes, as amended.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 1022

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 “Securing Energy Critical Elements and American Jobs Act of 2014”.

SEC. 2. DEFINITIONS.

In this Act:

(1) **APPROPRIATE CONGRESSIONAL COMMITTEES.**—The term “appropriate Congressional committees” means the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation and the Committee on Energy and Natural Resources of the Senate.

(2) **CENTER.**—The term “Center” means the Critical Materials Information Center established under section 102(b).

(3) **DEPARTMENT.**—The term “Department” means the Department of Energy.

(4) **ENERGY CRITICAL ELEMENT.**—The term “energy critical element” means any of a class of chemical elements that have a high risk of a supply disruption and are critical to one or more new, energy-related technologies such that a shortage of such element would significantly inhibit large-scale deployment of technologies that produce, transmit, store, or conserve energy.

(5) **HUB.**—The term “Hub” means the Critical Materials Energy Innovation Hub authorized in section 102(a).

(6) **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)).

(7) **PROGRAM.**—The term “program” means the program authorized in section 101(a).

(8) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

TITLE I—ENERGY CRITICAL ELEMENTS**SEC. 101. ENERGY CRITICAL ELEMENTS PROGRAM.**

(a) **AUTHORIZATION OF PROGRAM.**—

(1) **IN GENERAL.**—There is authorized in the Department a program of research, development, demonstration, and commercial application to assure the long-term, secure, and sustainable supply of energy critical elements sufficient to satisfy the national security, economic well-being, and industrial production needs of the United States. This program may be carried out primarily by the Critical Materials Energy Innovation Hub authorized in section 102(a).

(2) **PROGRAM ACTIVITIES.**—The program shall focus on areas that the private sector by itself is not likely to undertake because of technical and financial uncertainty and support activities to—

(A) improve methods for the extraction, processing, use, recovery, and recycling of energy critical elements;

(B) improve the understanding of the performance, processing, and adaptability in engineering designs using energy critical elements;

(C) identify and test alternative materials that can be substituted for energy critical elements and maintain or exceed current performance; and

(D) engineer and test applications that—

(i) use recycled energy critical elements;

(ii) use alternative materials; or

(iii) seek to minimize energy critical element content.

(3) **EXPANDING PARTICIPATION.**—In carrying out the program, the Secretary shall encourage multidisciplinary collaborations of participants, including opportunities for students at institutions of higher education.

(4) **CONSISTENCY.**—The program shall be consistent with the policies and programs in

the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601 et seq.).

(5) **INTERNATIONAL COLLABORATION.**—In carrying out the program, the Secretary shall collaborate, to the extent practicable, on activities of mutual interest with the relevant agencies of foreign countries with interests relating to energy critical elements.

(b) **PLAN.**—

(1) **IN GENERAL.**—Within 180 days after the date of enactment of this Act and biennially thereafter, the Secretary shall prepare and submit to the appropriate Congressional committees a plan to carry out the program.

(2) **SPECIFIC REQUIREMENTS.**—The plan required under paragraph (1) shall include a description of—

(A) the research and development activities to be carried out by the program during the subsequent 2 years;

(B) the expected contributions of the program to the creation of innovative methods and technologies for the efficient and sustainable provision of energy critical elements to the domestic economy; and

(C) how the program is promoting the broadest possible participation by academic, industrial, and other contributors.

(3) **CONSULTATION.**—In preparing each plan under paragraph (1), the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Department of Energy national laboratories, professional and technical societies, other Federal agencies, and other entities, as determined by the Secretary.

(c) **COORDINATION AND NONDUPLICATION.**—To the maximum extent practicable, the Secretary shall ensure that the activities carried out under this title are coordinated with, and do not unnecessarily duplicate the efforts of, other programs within the Federal Government.

(d) **AUTHORIZATION OF APPROPRIATIONS.**—

(1) **IN GENERAL.**—There are authorized to be appropriated to the Secretary to carry out this Act the following sums:

(A) For fiscal year 2015, \$25,000,000.

(B) For fiscal year 2016, \$25,000,000.

(C) For fiscal year 2017, \$25,000,000.

(D) For fiscal year 2018, \$25,000,000.

(E) For fiscal year 2019, \$25,000,000.

(2) **Availability.** Such sums shall remain available until expended.

SEC. 102. CRITICAL MATERIALS ENERGY INNOVATION HUB.

(a) **CRITICAL MATERIALS ENERGY INNOVATION HUB.**—To carry out the program, the Secretary is authorized to maintain a Critical Materials Energy Innovation Hub.

(b) **CRITICAL MATERIALS INFORMATION CENTER.**—

(1) **IN GENERAL.**—To collect, catalogue, disseminate, and archive information on energy critical elements, the Hub shall establish and maintain a Critical Materials Information Center.

(2) **CENTER ACTIVITIES.**—

(A) **In general.** The Center shall—

(i) serve as the repository for scientific and technical data generated by the research and development activities funded under this section;

(ii) assist scientists and engineers in making the fullest possible use of the Center’s data holdings;

(iii) seek and incorporate other information on energy critical elements to enhance the Center’s utility for program participants and other users;

(iv) provide advice to the Secretary concerning the program; and

(v) host conferences, at least annually, for participants in the program and other interested parties to promote information sharing and encourage new collaborative activities.

(B) **RESTRICTION.**—Not more than 2.5 percent of the amounts made available pursuant to this section may be used for hosting conferences under subparagraph (A)(v).

(c) **REVIEW AND REPORT TO CONGRESS.**—An award made to operate the Hub shall be for a period not to exceed 5 years, after which the award may be renewed, subject to a rigorous merit review. A Hub already in existence on the date of enactment of this Act may continue to receive support for a period of 5 years beginning on the date of establishment of that Hub. Following this process, if the Secretary determines that award renewal for the Hub is justified, then the Secretary must submit a report to the appropriate Congressional committees at least 30 days prior to the award renewal which explains the Secretary’s determination and describes the Department’s review process.

(d) **PROHIBITION ON CONSTRUCTION.**—No funds provided pursuant to this section may be used for construction of new buildings or facilities for the Hub. Construction of new buildings or facilities shall not be considered as part of the non-Federal share of a Hub costsharing agreement.

SEC. 103. SUPPLY OF ENERGY CRITICAL ELEMENTS.

The President, acting through the Critical Material Supply Chain Subcommittee of the Committee on Environment, Natural Resources, and Sustainability of the National Science and Technology Council, shall—

(1) coordinate the actions of applicable Federal agencies to promote an adequate and stable supply of energy critical elements necessary to maintain national security, economic well-being, and industrial production with appropriate attention to a long-term balance between resource production, energy use, a healthy environment, natural resources conservation, and social needs;

(2) identify energy critical elements and establish early warning systems for supply problems of energy critical elements;

(3) establish a mechanism for the coordination and evaluation of Federal programs with energy critical element needs, including Federal programs involving research and development, in a manner that complements related efforts carried out by the private sector and other domestic and international agencies and organizations;

(4) promote and encourage private enterprise in the development of an economically sound and stable domestic energy critical elements supply chain;

(5) promote and encourage the recycling of energy critical elements, taking into account the logistics, economic viability, environmental sustainability, and research and development needs for completing the recycling process;

(6) assess the need for and make recommendations concerning the availability and adequacy of the supply of technically trained personnel necessary for energy critical elements research, development, extraction, and industrial production, with a particular focus on the problem of attracting and maintaining high quality professionals for maintaining an adequate supply of energy critical elements; and

(7) report to the appropriate Congressional committees on activities and findings under this section.

TITLE II—NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH, AND DEVELOPMENT**SEC. 201. AMENDMENTS TO NATIONAL MATERIALS AND MINERALS POLICY, RESEARCH AND DEVELOPMENT ACT OF 1980.**

(a) **PROGRAM PLAN.**—Section 5 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604) is amended—

(1) by striking “date of enactment of this Act” each place it appears and inserting “date of enactment of the Securing Energy Critical Elements and American Jobs Act of 2014”;

(2) in subsection (b)(1), by striking “Federal Coordinating Council for Science, Engineering, and Technology” and inserting “National Science and Technology Council”;

(3) in subsection (c)—

(A) by striking “the Federal Emergency” and all that follows through “Agency, and”;

(B) by striking “appropriate shall” and inserting “appropriate, shall”;

(C) by striking paragraph (1);

(D) in paragraph (2), by striking “in the case” and all that follows through “subsection.”;

(E) by redesignating paragraph (2) as paragraph (1);

(F) by redesignating paragraph (3) as paragraph (2); and

(G) by amending paragraph (2), as redesignated, to read as follows:

“(2) assess the adequacy and stability of the supply of materials necessary to maintain national security, economic well-being, and industrial production.”;

(4) by striking subsection (d); and

(5) by redesignating subsections (e) and (f) as subsections (d) and (e), respectively.

(b) POLICY.—Section 3 of such Act (30 U.S.C. 1602) is amended—

(1) by striking “The Congress declares that it” and inserting “It”; and

(2) by striking “The Congress further declares that implementation” and inserting “Implementation”.

(c) IMPLEMENTATION.—The matter before paragraph (1) of section 4 of such Act (30 U.S.C. 1603) is amended

(1) by striking “For the purpose” and all that follows through “declares that the” and inserting “The”; and

(2) by striking “departments and agencies,” and inserting “departments and agencies to implement the policies set forth in section 3”.

SEC. 202. REPEAL.

The National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.) is repealed.

The SPEAKER pro tempore. Pursuant to the rule, the gentleman from Texas (Mr. SMITH) and the gentleman from California (Mr. SWALWELL) each will control 20 minutes.

The Chair recognizes the gentleman from Texas.

GENERAL LEAVE

Mr. SMITH of Texas. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and to include extraneous material on H.R. 1022, the bill now under consideration.

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

There was no objection.

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

H.R. 1022, the Securing Energy Critical Elements and American Jobs Act of 2014, addresses the supply of energy critical elements in the United States.

I want to thank the gentleman from California (Mr. SWALWELL), the ranking member of the Energy Subcommittee, for his diligent work on this legislation.

I also want to thank Mr. HULTGREN, who introduced his own critical ele-

ments bill in the last Congress, for his initiative on this subject.

Energy critical elements are important to energy-related technologies, communications technologies, and America’s weapons systems. These technologies range from photovoltaic cells and fluorescent lighting to fiber optics, aircraft engines and turbines, computers, and electric vehicles. Energy critical elements encompass a broad set of the elements, including rare earth elements.

Growth in demand for rare earths in a volatile market warrants particular attention and concern. China currently produces more than 90 percent of the global supply of rare earths. This is a result of a deliberate and decades-long strategy to develop its geologic reserves, undercut market prices, and drive out competition. Testimony before the Science, Space, and Technology Committee indicated that China has manipulated the market in recent years. It has reduced its export quotas and increased levies on rare earth oxides. This has caused wild price swings, market instability, and supply uncertainty.

This behavior is a potential threat to the United States’ ability to acquire many rare earths that both our energy sector and military rely upon. While a responsive market will continue to move towards solutions, there are reasonable and proper steps that the Federal Government can and should pursue in this area. These are reflected in this bipartisan bill.

This bill establishes a program under the Department of Energy that supports activities to improve the methods of extraction, use, and recycling of energy critical elements. It improves the understanding of performance, processing, and adaptability in the engineering of these elements, and it identifies and tests alternative materials that could replace energy critical elements. However, the legislation stipulates that the program shall only focus on areas where the private sector is unlikely to undertake these activities because of technical or financial uncertainty.

It also authorizes the Secretary of Energy to establish a Critical Materials Energy Innovation Hub that maintains a critical materials information center. This center collects, stores, and disseminates information on energy critical elements for scientists and researchers. In carrying out this program, the Secretary is directed to ensure that the activities are coordinated and do not duplicate other programs within the Federal Government.

Finally, the legislation requires the President, through the National Science and Technology Council, to coordinate the actions of involved Federal agencies. The administration also will identify and monitor the supply of energy critical elements, encourage private sector development, and promote the recycling of these elements.

This bill helps ensure that the United States remains globally and economi-

cally competitive and that our energy sector and military have the critical elements that they need.

Once again, I want to thank the gentleman from California (Mr. SWALWELL) and the gentleman from Illinois (Mr. HULTGREN) for their efforts on this legislation.

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

Mr. SWALWELL of California. Mr. Speaker, I yield myself such time as I may consume.

I rise in support of H.R. 1022, the Securing Energy Critical Elements and American Jobs Act of 2014.

I want to thank Chairman SMITH for working with me on this bill for over a year. We introduced this in March 2013. We have talked a number of times about this bill, and I appreciate the attention the majority staff has shown to get this bill to the floor. I also appreciate the work of our ranking member, Ms. JOHNSON, on the minority side, and that of Congressman HULTGREN, as well as the work of Mrs. LUMMIS, the chair of the Energy Subcommittee. We have truly worked in a bipartisan manner to move this bill to the floor.

Did you know, Mr. Speaker, that energy critical elements are crucial to powering our cell phones? to powering our airplanes and to producing renewable energy?

They include elements, many of which I never learned about in my chemistry class in high school, like cobalt, lanthanum, and helium. These elements are critical to the innovation economy and to our national defense, but here is the problem. Today, almost entirely all of them are imported from other countries like China. It is time to get America into the game.

I introduced this bill to help ensure that the United States continues to have access to materials that are essential to technologies we rely upon every day. These materials are also crucial to developing new technologies that will help make us leaders in the clean energy economy of the future, helping to create good jobs here in America.

I also want to note an important distinction from this bill and a bill that passed in the House in the 111th Congress in 2010. There are three big differences: one, this bill does not have any loan guarantees; two, this bill does not spend a single new dollar; and three, this bill does not create a new program. Those are important distinctions from the bill that passed in the 111th Congress.

Many Americans may not realize just how dependent we are upon energy critical elements. One of these elements, No. 3 on the periodic table and represented here on this poster, is lithium. The cell phones, laptops, and other mobile devices upon which we all greatly rely and use—not to mention the energy storage systems for many commercial aircraft—all require lithium to function effectively. To make

these products here in America and not cede leadership across the world, we need to have access to lithium.

We also can't lose sight of how important these elements are in enabling a new era of energy production and use. From advanced solar energy technologies to natural gas and wind turbines, nuclear reactors, and state-of-the-art batteries for electrical and hybrid vehicles, a series of specific elements in limited supply are currently irreplaceable, and we need to ensure continued access to them even as we work to develop substitute materials wherever possible.

It is not just about commercial products and explicit energy production. Rhenium, No. 75 on the periodic table, which is represented here on this poster, is used to make parts for jet engines, including the jets that provide America's air superiority for our Air Force and Navy. Having access to this metal, thus, has an important national security component.

A subset of these critical elements, with names like neodymium and terbium, is what are considered rare earth elements. Incidentally, there is nothing rare about these elements in the sense that they are only found in one or two places in the world but, rather, that, in many instances, they aren't found in sufficient quantities to make them minable and, where they are, doing so would be cost prohibitive and a very long-term endeavor.

As one example, I have a poster here representing terbium, No. 65 on the periodic table. It is a silvery metal. Most people probably have never heard of it, but it is used in high-efficiency lighting and, as exemplified on this poster, in wind turbines, among many other energy uses.

One country, China, has recognized the importance of these rare earth elements, and it has put vast amounts of resources into becoming the world's leading supplier of them. As a result, China is currently responsible for the mining and distribution of 97 percent of rare earth elements. Predictably, China hasn't been shy about using this monopoly as leverage against its international competitors. In fact, just a few years ago, China temporarily cut off rare earth supplies to Japan, the European Union, and the United States, further highlighting the potential consequences of relying so heavily upon a single nation for rare earth production and driving up the costs for American manufacturers.

The bipartisan version that we are discussing here today, H.R. 1022, provides a strong and sustainable path forward for helping ensure that the United States maintains a sufficient, reliable supply of energy critical elements. It explicitly authorizes in law the Critical Materials Energy Innovation Hub—a collaboration among national laboratories, universities, research institutes, and private companies that has been up and running since early last year—and subjects this hub

to a rigorous merit review process prior to renewal for an additional 5 years. Essentially, there are tight controls in place to make sure we always have the oversight of this hub.

Let me pause here and emphasize this point as there seems to be some confusion. There are tight controls that will be in place in authorizing this hub. Again, I want to remind the Speaker that there are no new programs, no loan guarantees, and not a new dollar spent.

My bill requires the Department of Energy to develop and regularly update a strategic plan in this area, and it authorizes the hub to maintain a critical materials information center to aid in the collection and dissemination of data to ensure that all of our Nation's researchers in the public and private sectors have access to the most up-to-date information. Finally, my bill charges the National Science and Technology Council with ensuring the appropriate interagency coordination with research activities.

With that, I reserve the balance of my time.

Mr. SMITH of Texas. Mr. Speaker, at this time, there are no other individuals on this side who wish to speak on this bill, so I continue to reserve the balance of my time.

Mr. SWALWELL of California. Mr. Speaker, I yield 5 minutes to the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON), the ranking member of the Science, Space, and Technology Committee.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Speaker, I rise in support of H.R. 1022 and two other Science, Space, and Technology bills being considered today.

Earlier this year, all of my Democratic committee colleagues joined me in introducing H.R. 4159, the America COMPETES Reauthorization Act of 2014. Two of the bills being considered today are similar or identical to provisions we included in our COMPETES bill, and the third bill similarly reflects a longstanding bipartisan effort, and I will speak briefly about each of the three bills.

First, I would like to speak in support of H.R. 1022, a bill that would authorize a research and development program to explore ways to sustain our supply of materials that is critical to a wide range of advanced energy technologies.

According to a recent study by the American Physical Society and the Materials Research Society, the U.S. is currently dependent on other countries for more than 90 percent of most of these types of materials. We are particularly dependent on China, which has demonstrated a willingness to at least temporarily cut off our supply of these energy critical elements in the recent past, so this bill is a timely contribution to our national, economic, and energy security.

I would like to thank my colleague and friend, Mr. SWALWELL, for intro-

ducing this important piece of legislation, as well as Chairman SMITH and his staff for working diligently with us to bring it to the floor today.

□ 1545

Next, I want to thank Mr. BUCSHON for introducing H.R. 5035, a bill to reauthorize the National Institute of Standards and Technology.

NIST is our Nation's oldest science agency and plays a very important role in U.S. innovation and competitiveness through advancing measurement science and providing unique measurement facilities to industry.

While we don't often think about measurement science, it is critically important. Anytime a technology is developed, measurement science is needed to ensure that the technology is working as intended and is compatible with existing systems. NIST plays a role in fields from bioscience to forensics to automobile safety technology.

NIST has also taken leadership roles in crosscutting Federal efforts in cybersecurity and advanced manufacturing.

H.R. 5035 reauthorizes and makes important updates to the program at NIST, including the Manufacturing Extension Partnership program, which helps small- and medium-sized manufacturing companies create and retain American jobs.

My one concern with H.R. 5035 is the low authorization level. I hope that when this bill goes to conference with the Senate we can agree to give NIST an authorization level that allows it to fully realize its critical role in U.S. innovation and competitiveness. In the meantime, because the policy changes in this bill are good and important, I support it.

Finally, I would like to thank Mr. HULTGREN and Mr. KILMER for introducing H.R. 5120, a bill to provide important new tools to accelerate commercialization of new technologies developed by DOE laboratories and programs in partnership with the private sector.

This bill closely mirrors several critical provisions in the America Competes Reauthorization Act of 2014, as well as the Senate's bipartisan America INNOVATES Act sponsored by Senators COONS and RUBIO.

It also reflects a number of recommendations found in a recent report produced by the Center for American Progress, the Information Technology and Innovation Foundation, and The Heritage Foundation, three groups that you don't often find in the same line of authors.

I want to thank Chairman SMITH and many other colleagues on both sides of the aisle, as well as the other side of the Capitol, for working with us to produce a strong bill that we can support. All three of these bills are products of strong bipartisan efforts, and I urge my colleagues to support them.

Mr. SMITH of Texas. Mr. Speaker, before I yield back, I would like to

thank the gentlewoman from Texas, the ranking member of the Science, Space, and Technology Committee, EDDIE BERNICE JOHNSON, for the comments that she just made. They are much appreciated.

Mr. Speaker, I reserve the balance of my time, but I am prepared to yield back.

Mr. SWALWELL of California. Mr. Speaker I will include an article from The Wall Street Journal in support of H.R. 1022 in the RECORD. This is a December 5, 2013, Wall Street Journal article titled, "China Still Dominates Rare-Earth Processing."

[From the Wall Street Journal, Dec. 5, 2013]

CHINA STILL DOMINATES RARE-EARTH PROCESSING

(By James T. Aredy)

SHENZHEN, China.—When U.S. Rare Earths Inc. begins mining on the border of Montana and Idaho about two years from now, the U.S. will gain a new domestic, non-Chinese source of minerals essential to making electronic devices and weaponry components.

But at the moment, there's virtually no place for these minerals to be processed into something useful—except China.

China's share of global rare-earth output has been shrinking recently as miners elsewhere capitalized on fears the country controls too much global supply. Even so, China still dominates the complex—and often polluting—middle steps that turn mined material into useful ingredients, including metals and magnets. For example, China supplies about 80% of the specialized magnets produced with rare-earth ingredients like neodymium that are used in everything from elevators to cruise missiles.

"It's amazing people haven't connected these dots," said U.S. Rare Earths Chief Executive Kevin Cassidy. His company plans to build facilities in the U.S. to handle difficult middle-stage processes, but that will be expensive and require numerous regulatory approvals.

Three years ago China shocked high-tech industry by tightening export controls on a group of 17 elements called rare earths that sent their prices rising as much as tenfold, prompting then-U.S. Secretary of State Hillary Clinton to dub the scare a "wake up call."

Miners responded by racing to find new rare-earth sources in the U.S. and elsewhere. Industry authority Dudley Kingsnorth says those new sources already cut China's share of global supply to 86% from 93% between 2011 and 2012. China's export policies are the subject of a continuing dispute between Beijing, Washington and others before the World Trade Organization. The WTO in October ruled illegal certain restrictions on Chinese rare-earth exports, though Beijing is expected to appeal the largely symbolic decision.

But when it comes to processing rare earths, China faces little competition—and Wang Qin's greasy hands illustrate why. The 45-year-old machinist for Feller Magnets Corp. in the southern city of Shenzhen runs dozens of machines that slice magnetic blocks made with rare earth into razor-thin discs that his company says will be installed in mobile phones.

While his computerized saws can meet precision specifications for Feller's high-technology customers, the machines also slick its factory floors with oil. Basins of acids and extreme heat feature in other parts of the facility. The company, which says half its output is sold in China compared with only 30% in recent years, didn't respond to a request for comment on factory conditions.

China's dominance in a field with a poor environmental record illustrates one way it plays key roles more generally in global manufacturing. China tops world output of chemicals and fertilizers, as well as making lead-acid batteries and harvesting of scrap computer parts for metal. Business executives say that China's backbone in intermediate industries, including rare-earth processing, allows it to draw in related businesses that depend on the products and thereby deepening its importance to production supply chains from computers to automobiles.

In 2010 Beijing significantly crimped exports of rare-earth minerals citing environmental reasons to clean up a chaotic industry. Seeing prices of the elements soar, investors funded dozens of mine exploration projects around the world.

Since then, a California mine and one in Australia have ramped up, with others in South Africa, Vietnam, India and Kazakhstan now in the construction phase, according to Gareth Hatch, an industry investor and principal at Illinois-based Technology Metals Research LLC. But he said many prospectors who rushed after 2010 to bring new supplies to market wrongly assumed, "if you build the mine, the downstream supply chain will magically appear outside of China."

A number of U.S. defense contractors declined to comment on industry trends. Northrop Grumman Corp. and Lockheed Martin Corp. referred questions to the Aerospace Industries Association, which pointed to a September report from the U.S. Congressional Research Service that said "most rare earth materials' processing is performed in China, giving it a dominant position that could affect world-wide supply and prices."

A Defense Department spokesman said the military continually monitors the situation while citing an "increasingly diverse and robust domestic and global supply chain for rare earth materials." A March 2012 military report highlighted positive trends "for a market capable of meeting future U.S. Government demand."

While Mr. Kingsnorth, executive director of Industrial Minerals Company of Australia, estimates China's share of world production could slide to 63% by 2016, he points out that China continues to dominate the nine steps between mining rare earths and producing something with the material.

After ore is pried from the ground and unwanted minerals are sifted away to make a concentrate of minerals, complex acid and chemical treatments are required to separate individual rare earths into quantities that are useful. Many of the 17 rare earths share such similar physical properties that separating individual elements can require several months and 1,000 chemical treatments.

Outside China, few places have the industrial capacity to separate the elements. Companies in the U.S., Russia, France, Japan and elsewhere handle some of these steps, but China is the only place that has the industrial capacity to do them all.

Among those producing fresh output is U.S.-based Molycorp Inc. Yet Molycorp exports some of the neodymium and samarium from its giant deposit in California's Mojave Desert to its processing facilities in China.

"The downstream does take longer to develop," says Constantine Karayannopoulos, who until this month was Molycorp's interim chief executive officer and is now vice chairman.

Molycorp said it spent \$1.5 billion to build a separation facility in California, and Mr. Karayannopoulos estimates a quarter to a third of that cost is related to ensuring the plant operates to high environmental stand-

ards, which include recycling wastewater. Still, Molycorp says it is cheaper to make some of its materials at its facilities in China. Mr. Karayannopoulos also estimates around 60% of that output is sold to multinational companies already in China.

"I can't overemphasize how complex supply chains are," said Mr. Karayannopoulos.

A big effort to reduce China's role in the intermediate steps of processing rare earths is being undertaken by Australia's Lynas Corp. with a plant opened last year in Malaysia to handle separation processes. But local environmentalists decry the facility as dangerous, and Lynas says it has processed only a fraction of its output there this year. Lynas says none of its material is being sent to China for separation.

Increasingly, China is taking steps to expand into more profitable aspects of the rare-earth business that follow the separation processes, instead of exporting those raw materials. Mr. Kingsnorth likens such efforts to European winemakers: "France doesn't sell any grapes," he said.

Mr. SWALWELL of California. Mr. Speaker, efforts that went into bringing this bill to the floor reflect what our constituents at home want to see from us here in Washington, a bill that was introduced in March of 2013, a bill where revisions were made, compromises were made. The loan guarantee part of the bill was taken out at the request of the majority staff so that we could bring this bill to the floor in a bipartisan way.

I am proud that I can go home and tell my constituents I was able to work with my colleagues on a bill that will advance American innovation, American energy security, and national security.

So, Mr. Speaker, I urge my colleagues to support this bill. If you want to go home and tell your constituents that you were part of a bipartisan bill that protects American innovation, manufacturing, energy security, and national security, vote for this bill.

If you want to go home and tell your constituents that you are a part of seeing jobs go over to China and ceding leadership in energy, critical elements, then you should vote against this bill.

But I think this Congress wants to take back leadership when it comes to where we get our energy. That is why I am supporting this bill. That is why I am grateful that the chairman brought this bill to the floor, and I urge my colleagues to support this bipartisan H.R. 1022.

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

Mr. SMITH of Texas. 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 Texas (Mr. SMITH) that the House suspend the rules and pass the bill, H.R. 1022, as amended.

The question was taken.

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

Mr. MULVANEY. 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.

NIST REAUTHORIZATION ACT OF
2014

Mr. BUCSHON. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 5035) to reauthorize the National Institute of Standards and Technology, and for other purposes.

The Clerk read the title of the bill.

The text of the bill is as follows:

H.R. 5035

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 “NIST Reauthorization Act of 2014”.

SEC. 2. AUTHORIZATION OF APPROPRIATIONS.

(a) FISCAL YEAR 2014.—

(1) IN GENERAL.—There are authorized to be appropriated to the Secretary of Commerce \$850,000,000 for the National Institute of Standards and Technology for fiscal year 2014.

(2) SPECIFIC ALLOCATIONS.—Of the amount authorized by paragraph (1)—

(A) \$651,000,000 shall be for scientific and technical research and services laboratory activities;

(B) \$56,000,000 shall be for the construction and maintenance of facilities; and

(C) \$143,000,000 shall be for industrial technology services activities, of which \$128,000,000 shall be for the Manufacturing Extension Partnership program under sections 25 and 26 of the National Institute of Standards and Technology Act (15 U.S.C. 278k and 278l).

(b) FISCAL YEAR 2015.—

(1) IN GENERAL.—There are authorized to be appropriated to the Secretary of Commerce \$855,800,000 for the National Institute of Standards and Technology for fiscal year 2015.

(2) SPECIFIC ALLOCATIONS.—Of the amount authorized by paragraph (1)—

(A) \$670,500,000 shall be for scientific and technical research and services laboratory activities;

(B) \$55,300,000 shall be for the construction and maintenance of facilities; and

(C) \$130,000,000 shall be for industrial technology services activities, of which \$130,000,000 shall be for the Manufacturing Extension Partnership program under sections 25 and 26 of the National Institute of Standards and Technology Act (15 U.S.C. 278k and 278l).

SEC. 3. STANDARDS AND CONFORMITY ASSESSMENT.

Section 2 of the National Institute of Standards and Technology Act (15 U.S.C. 272) is amended—

(1) in subsection (b)—

(A) in the matter preceding paragraph (1), by striking “authorized to take” and inserting “authorized to serve as the President’s principal adviser on standards policy pertaining to the Nation’s technological competitiveness and innovation ability and to take”;

(B) in paragraph (3), by striking “compare standards” and all that follows through “Federal Government” and inserting “facilitate standards-related information sharing and cooperation between Federal agencies”; and

(C) in paragraph (13), by striking “Federal, State, and local” and all that follows through “private sector” and inserting “technical standards activities and conformity assessment activities of Federal, State, and local governments with private sector”; and

(2) in subsection (c)—

(A) in paragraph (21), by striking “and” after the semicolon;

(B) by redesignating paragraph (22) as paragraph (24); and

(C) by inserting after paragraph (21) the following:

“(22) participate in and support scientific and technical conferences;

“(23) perform pre-competitive measurement science and technology research in partnership with institutions of higher education and industry to promote United States industrial competitiveness; and”.

SEC. 4. VISITING COMMITTEE ON ADVANCED TECHNOLOGY.

Section 10 of the National Institute of Standards and Technology Act (15 U.S.C. 278) is amended—

(1) in subsection (a)—

(A) by striking “15 members” and inserting “not fewer than 11 members”;

(B) by striking “at least 10” and inserting “at least two-thirds”; and

(C) by adding at the end the following: “The Committee may consult with the National Research Council in making recommendations regarding general policy for the Institute.”; and

(2) in subsection (h)(1), by striking “, including the Program established under section 28.”.

SEC. 5. POLICE AND SECURITY AUTHORITY.

Section 15 of the National Institute of Standards and Technology Act (15 U.S.C. 278e) is amended—

(1) by striking “of the Government; and” and inserting “of the Government.”; and

(2) by striking “United States Code.” and inserting “United States Code; and (i) for the protection of Institute buildings and other plant facilities, equipment, and property, and of employees, associates, visitors, or other persons located therein or associated therewith, notwithstanding any other provision of law.”.

SEC. 6. EDUCATION AND OUTREACH.

The National Institute of Standards and Technology Act (15 U.S.C. 271 et seq.) is amended by striking sections 18, 19, and 19A and inserting the following:

“SEC. 18. EDUCATION AND OUTREACH.

“(a) IN GENERAL.—The Director may support, promote, and coordinate activities and efforts to enhance public awareness and understanding of measurement sciences, standards, and technology by the general public, industry, and academia in support of the Institute’s mission.

“(b) RESEARCH FELLOWSHIPS.—

“(1) IN GENERAL.—The Director may award research fellowships and other forms of financial and logistical assistance, including direct stipend awards, to—

“(A) students at institutions of higher education within the United States who show promise as present or future contributors to the mission of the Institute; and

“(B) United States citizens for research and technical activities of the Institute.

“(2) SELECTION.—The Director shall select persons to receive such fellowships and assistance on the basis of ability and of the relevance of the proposed work to the mission and programs of the Institute.

“(3) DEFINITION.—For the purposes of this subsection, financial and logistical assistance includes, notwithstanding section 1345 of title 31, United States Code, or any contrary provision of law, temporary housing and local transportation to and from the Institute facilities.

“(c) POST-DOCTORAL FELLOWSHIP PROGRAM.—The Director shall establish and conduct a post-doctoral fellowship program, subject to the availability of appropriations, that shall include not fewer than 20 fellows per fiscal year. In evaluating applications for fellowships under this subsection, the Director shall give consideration to the goal of

promoting the participation of underrepresented students in research areas supported by the Institute.”.

SEC. 7. PROGRAMMATIC PLANNING REPORT.

Section 23(d) of the National Institute of Standards and Technology Act (15 U.S.C. 278i(d)) is amended by adding at the end the following: “The 3-year programmatic planning document shall also describe how the Director is addressing recommendations from the Visiting Committee on Advanced Technology established under section 10.”.

SEC. 8. ASSESSMENTS BY THE NATIONAL RESEARCH COUNCIL.

(a) NATIONAL ACADEMY OF SCIENCES REVIEW.—Not later than 6 months after the date of enactment of this Act, the Director of the National Institute of Standards and Technology shall enter into a contract with the National Academy of Sciences to conduct a single, comprehensive review of the Institute’s laboratory programs. The review shall—

(1) assess the technical merits and scientific caliber of the research conducted at the laboratories;

(2) examine the strengths and weaknesses of the 2010 laboratory reorganization on the Institute’s ability to fulfill its mission;

(3) evaluate how cross-cutting research and development activities are planned, coordinated, and executed across the laboratories; and

(4) assess how the laboratories are engaging industry, including the incorporation of industry need, into the research goals and objectives of the Institute.

(b) ADDITIONAL ASSESSMENTS.—Section 24 of the National Institute of Standards and Technology Act (15 U.S.C. 278j) is amended to read as follows:

“SEC. 24. ASSESSMENTS BY THE NATIONAL RESEARCH COUNCIL.

“(a) IN GENERAL.—The Institute shall contract with the National Research Council to perform and report on assessments of the technical quality and impact of the work conducted at Institute laboratories.

“(b) SCHEDULE.—Two laboratories shall be assessed under subsection (a) each year, and each laboratory shall be assessed at least once every 3 years.

“(c) SUMMARY REPORT.—Beginning in the year after the first assessment is conducted under subsection (a), and once every two years thereafter, the Institute shall contract with the National Research Council to prepare a report that summarizes the findings common across the individual assessment reports.

“(d) ADDITIONAL ASSESSMENTS.—The Institute, at the discretion of the Director, also may contract with the National Research Council to conduct additional assessments of Institute programs and projects that involve collaboration across the Institute laboratories and centers and assessments of selected scientific and technical topics.

“(e) CONSULTATION WITH VISITING COMMITTEE ON ADVANCED TECHNOLOGY.—The National Research Council may consult with the Visiting Committee on Advanced Technology established under section 10 in performing the assessments under this section.

“(f) REPORTS.—Not later than 30 days after the completion of each assessment, the Institute shall transmit the report on such assessment to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.”.

SEC. 9. HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP.

Section 25 of the National Institute of Standards and Technology Act (15 U.S.C. 278k) is amended to read as follows: