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Senate

The Senate met at 10 a.m. and was called to order by the President protempore (Mr. GRASSLEY).

PRAYER

The Chaplain, Dr. Barry C. Black, offered the following prayer:

Let us prav.

God of us all, thank You for this moment that unites us in the fellowship of prayer. Make us conscious of Your presence and unite us in our efforts to do Your will on Earth.

Lord, inspire the hearts and minds of our lawmakers to strengthen the bonds between us, as they seek to live lives of integrity. May no partisanship mar the unity of spirit they must have to make America stronger, wiser, and better. Deliver them from every unworthy motive, as they labor to honor You. Lord, lift their burdens, lessen their fears, and give them Your peace.

We pray, in Your great Name. Amen.

PLEDGE OF ALLEGIANCE

The President pro tempore led the Pledge of Allegiance, as follows:

I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

The PRESIDING OFFICER (Mrs. HYDE-SMITH). The Senator from Iowa.

Mr. GRASSLEY. Madam President, I ask unanimous consent to speak in morning business for 1 minute.

The PRESIDING OFFICER. Without objection, it is so ordered.

JUDICIARY

Mr. GRASSLEY. Madam President, an independent judiciary is one of the cornerstones of our democracy. Judges serve lifetime appointments, free from political pressure so they can render impartial judgment without fear of retribution.

Yesterday, unfortunately, our country took a step in the wrong direction

with the Democratic leader's comments at a microphone in front of the Supreme Court.

The Democratic leader harangued and warned Justices Gorsuch and Kavanaugh by name. He said they would "pay the price" and "won't know what hit you if you go forward with these awful decisions."

At best, it was an injection of partisan politics into a process that should be immune to these Justices. At worst, it was a threat, targeting two sitting members of the Supreme Court. Either way, I encourage my colleague, the Democratic leader, to apologize to those Supreme Court Justices and to do it here on the floor.

I yield the floor.

RECOGNITION OF THE MAJORITY LEADER

The PRESIDING OFFICER. The majority leader is recognized.

SUPREME COURT

Mr. McConnell. Madam President, I planned to spend my remarks today discussing our bipartisan, bicameral agreement to fund the fight against the new coronavirus. I was looking forward to congratulating all my colleagues and discussing all the ways this funding will help our public health experts, frontline healthcare professionals, and state and local officials combat the spread of this virus and mitigate its effects. It is a serious agreement to meet a serious challenge, and today we will send it to President Trump's desk.

So today will be an important day for the country, and it was going to be a proud day for the Senate, but instead the Nation's eyes are on this body for an entirely different reason.

A few weeks ago, I spoke on this floor about a dangerous trend that threatens our self-governance. I explained how some in the Democratic Party appear more interested in attacking the institutions of our government than in working within them, how Democrats increasingly respond to political disappointments with extreme claims that our system of government itself must be broken. The failure can't be their own. It can't be that the left needs better arguments or ideas. No. No, the fault must lie with the Constitution itself.

Democrats have tried to cloak their anger at President Trump in rhetoric about protecting norms and institutions, but, in reality, it is their own side of the aisle where anti-institutionalism is rampant. Rampant. We can talk about attacks on the office of the Presidency, on the Electoral College, on the First Amendment, on the Senate itself, but most striking of all has been the shameless efforts to bully our Nation's independent judiciary, and yesterday those efforts took a dangerous and disturbing turn.

By now many already know what the Democratic leader shouted outside the Supreme Court yesterday morning. I am sorry to have to read it into the RECORD. First, he prompted a crowd of leftwing activists to boo two of the Associate Justices—as though Supreme Court Justices were professional athletes and Senator SCHUMER were jeering from the stands. Then the senior Senator from New York said this:

I want to tell you, Gorsuch! I want to tell you, Kavanaugh! You have released the whirlwind, and you will pay the price. You won't know what hit you if you go forward with these awful decisions.

I am not sure where to start.

There is nothing to call this except a threat, and there is absolutely no question to whom—to whom it was directed.

Contrary to what the Democratic leader has since tried to claim, he very, very clearly was not addressing Republican lawmakers or anyone else. He literally directed the statement to the Justices by name. He said: "[I]f you go forward with these awful decisions."

• This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.



which could only apply to the Court itself. The minority leader of the United States Senate threatened two Associate Justices of the U.S. Supreme Court. Period. There is no other way to interpret that.

Even worse, the threat was not clearly political or institutional. As I will discuss in a moment, these kinds of threats are sadly nothing new from Senate Democrats. This was much broader—much broader.

The Democratic leader traveled to the workplace of the two Justices, and in front of a crowd of activists, he told those Justices "you will pay the price" right in front of the Supreme Court building and "you won't know what hit you." He said this right in front of the Supreme Court building.

If any American had these words shouted at them from a sidewalk outside their office, they would hear those threats as personal, and most likely they would hear them as threatening or inciting violence. That is how any American would interpret those words if they were directed at them. That is certainly how the press and leading Democrats would have characterized them if President Trump or any senior Republican had said anything even remotely—remotely—similar. We have seen much more hay made out of much less.

Perhaps our colleague thinks this is absurd. Perhaps he would like the most generous possible interpretation; that he got carried away and he didn't mean what he said, but if he cannot even admit to saying what he said, we certainly cannot know what he meant.

At the very best, his comments were astonishingly reckless and completely irresponsible. Clearly, as the Chief Justice stated in a rare and extraordinary rebuke, they were "dangerous" because no matter the intention, words carrying the apparent threat of violence can have horrific, unintended consequences.

In the most recent year on record, the U.S. Marshal Service tracked thousands of threats and inappropriate communications against the judiciary—thousands of threats against the judiciary.

Less than 3 years ago, of course, an unhinged and unstable leftwing activist attempted a mass murder of congressional Republicans at a baseball field right across the river.

A Senate leader appearing to threaten or incite violence on the steps of the Supreme Court could literally be a matter of deadly seriousness.

So I fully anticipate our colleague would quickly withdraw his comments and apologize. That is what even reliably liberal legal experts like Laurence Tribe and Neal Katyal have publicly urged.

Instead, our colleague doubled down—doubled down. He tried to gaslight the entire country and stated that he was actually threatening fellow Senators, as though that would be much better, but that is a fiction. A

few hours later, the Democratic leader tripled down. Instead of taking Chief Justice Roberts' sober and appropriate statement to heart, he lashed out, yet again, and tried to imply the Chief Justice was biased—biased—for doing his job and defending the Court. Let me say that again. He tripled down, and he lashed out, yet again, and tried to imply that the Chief Justice was biased for doing his job and defending the Court. Our colleague therefore succeeded in attacking 33 percent of the Supreme Court in a space of a few hours.

Throughout the impeachment and the Senate trial, for months, Washington Democrats preached sermons about the separation of powers and respect among equal branches.

So much for all of that. And sadly, this attack was not some isolated incident. The leftwing campaign against the Federal Judiciary did not begin yesterday—not yesterday. My colleagues will recall that during the impeachment trial the senior Senator from Massachusetts and outside pressure groups tried to attack the Chief Justice, sitting right in that chair, for staying neutral instead of delivering the outcomes that they wanted. These same groups came to Senator SCHU-MER's defense yesterday with gratuitous attacks against the Chief Justice for condemning the threats against his colleagues.

Last summer—last summer a number of Senate Democrats sent an extraordinary brief to the Supreme Court. It threatened to inflict institutional change on the Court if it did not rule the way the Democrats wanted. In other words, give us the ruling we want or we will change the numbers of the Court. Here is what they wrote: "The Supreme Court is not well...."

Really?

The Supreme Court is not well. . . . Perhaps the Court can heal itself before the public demands it be "restructured . . . "

What that means is, you rule the way we want or we are going to expand the numbers and change the outcome—a political threat, plain as day. As you read the document, you half expected it to end by saying: That is some nice judicial independence you got over there. It would be a shame if something happened to it.

It couldn't have been more clear. Independence from political passions is the cornerstone of our judiciary in our country. Judicial independence is what enables courts to do justice even when it is unpopular, to protect constitutional rights even when powerful interests want them infringed. Judicial independence is what makes the United States of America a republic of laws rather than of men.

It has been almost a century since the last time Democrats threatened to pack the Supreme Court because they wanted different rulings. History still judges that disgraceful episode to this day.

I would suggest that my Democratic colleagues spend less time trying to

threaten impartial judges and more time coming up with ideas that are actually constitutional.

Fortunately, this extraordinary display contains one ironic silver lining. These clumsy efforts to erode a pillar of American governance have just reminded everyone why that pillar is so crucial. These efforts to attack judicial independence remind us that independence is essential. Every time Democrats try to threaten sitting judges, we are reminded exactly—exactly—why the Framers gave them life tenure and salary protection, precisely why they did it. Every time Democrats toy with packing new seats onto the Court, we are reminded exactly why, as Justice Ginsburg recently said, "Nine seems to be a good number." Justice Ginsburg said, "Nine seems to be a good number.

The distinguished men and women of the Supreme Court do not and must not serve at the pleasure of angry partisans—must not serve at the pleasure of angry partisans. They do not need to pay any mind to unhinged threats, as shameful as they may be. In fact, as the Chief Justice reminded us vesterday, they are duty-bound to pay such things no attention at all. Their job description is simple: to apply the law to the facts, as the Chief Justice put it, "without fear or favor from whatever quarter." I have great confidence the Court will do just that. I am confident that if the facts and the Constitution would have led the Court to disappoint Democrats the day before yesterday, they would still feel free to do so today, tomorrow, and beyond, notwithstanding these shameful tactics.

I had hoped I would not need to reiterate what every Republican Senator told the Court in August after Senate Democrats sent their threatening brief, but today I have no choice but to say it again: Republicans are absolutely and unshakably committed to the core constitutional principle of an independent Federal judiciary—the core constitutional principle of an independent Federal judiciary.

As long as this majority holds the gavel, we will never let the minority leader's dangerous views become policy. This majority will ensure that the only casualties of this recklessness are the reputations of those who engage in it.

RESERVATION OF LEADER TIME

The PRESIDING OFFICER. Under the previous order, the leadership time is reserved.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER. Morning business is closed.

LEGISLATIVE SESSION

ADVANCED GEOTHERMAL INNOVATION LEADERSHIP ACT OF 2019—Resumed

The PRESIDING OFFICER. Under the previous order, the Senate will resume consideration of S. 2657, which the clerk will report.

The senior assistant legislative clerk read as follows:

A bill (S. 2657) to support innovation in advanced geothermal research and development, and for other purposes.

Pending:

Murkowski amendment No. 1407, in the nature of a substitute.

McConnell (for Ernst) amendment No. 1419 (to amendment No. 1407), to establish a grant program for training wind technicians.

RECOGNITION OF THE MINORITY LEADER
The PRESIDING OFFICER. The
Democratic leader is recognized.

WOMEN'S HEALTHCARE

Mr. SCHUMER. Madam President, I just listened to the Republican leader, and there was a glaring omission in his speech. He did not mention what the rally yesterday, my speech, or the case before the Court was about—a woman's constitutional right to choose.

To the women of America: What we are talking about here, what I am fighting for here is your right to choose—an issue, of course, Leader McConnell completely ignored in his speech. I feel so passionately about this issue, and I feel so deeply the anger of women all across America about Senate Republicans and the courts working hand in glove to take down Roe v. Wade.

I just read about a woman in Shreveport who, under the Louisiana law now before the Supreme Court, would have to travel over 300 miles to exercise her constitutional freedoms. And this is happening in States across the country.

Republican State legislatures are restricting a woman's right to choose so severely as to make it nonexistent, and the courts are now likely to go along because Senate Republicans have confirmed nominees they believe will strip away women's rights and fundamentally change this country, going so far as to deny a duly elected President the right to pick a Supreme Court Justice.

Republicans here in the Senate are afraid to confront this issue directly. So they try to accomplish through the courts what they would never accomplish in the court of public opinion, and they leave women out in the cold.

So, yes, I am angry. The women of America are angry. And, yes, we will continue to fight for a woman's right to choose. I will continue to fight for the women of America.

Now, I should not have used the words I used yesterday. They didn't come out the way I intended to. My point was that there would be political consequences—political consequences—

for President Trump and Senate Republicans if the Supreme Court, with the newly confirmed Justices, stripped away a woman's right to choose. Of course, I didn't intend to suggest anything other than political and public opinion consequences for the Supreme Court, and it is a gross distortion to imply otherwise.

I am from Brooklyn. We speak in strong language. I shouldn't have used the words I did, but in no way was I making a threat. I never—never—would do such a thing. Leader McConnell knows that, and Republicans who are busy manufacturing outrage over these comments know that too.

What will remain long after the clamor over my comments dies down is the issue at hand: a woman's constitutional right to choose and Republican attempts to invalidate it.

The fact that my Republican colleagues have worked systematically over the course of decades to install the judicial infrastructure to take down Roe v. Wade and do very real damage to the country and to the American way of life—that is the issue that will remain, and we owe—I owe—an obligation to the women of America to fight for their constitutional rights.

I vield the floor.

The PRESIDING OFFICER. The Democratic whip.

Mr. DURBIN. Madam President, I come to the floor this morning as a Senate colleague who may know CHUCK SCHUMER better than most. We lived under the same roof for almost 20 years. We know one another. We know each other's families. We have been together through moments of sadness and triumph. I know him well, and I come to the floor this morning to make this statement.

I respect Chief Justice John Roberts. but I respectfully disagree with the statement he made yesterday about Senator SCHUMER's comments before the Supreme Court Building. It is not in CHUCK SCHUMER's nature to physically threaten anyone—anyone—or to create a dangerous situation for any person. That is just not CHUCK SCHU-MER. Even his passion, as you just heard about the issue of women's healthcare, would not lead him to that position. Yes, as he said, he could have chosen his words more carefully, but is there a person in public life who has ever stood in this Chamber or any other who wouldn't say the same about some public utterance?

What troubles me is his being admonished publicly by President Donald Trump for his use of words—being admonished by President Trump for his use of words. It just takes your breath away to think that this President, with his thousands of tweets and statements and utterances—outrageous as they have been—would be standing as a judge of others when it comes to the use of language.

I listened carefully this morning as Senator McConnell, the Republican leader, came to the floor and spoke,

when he talked about his singular respect for the Supreme Court and judicial independence. He used the phrase repeatedly: "judicial independence." He called the judiciary, rightly, a pillar of the American Government.

Does Senator McConnell think we have forgotten what he did when it came to the Supreme Court after Justice Scalia passed away? He intentionally left a vacancy in the Court for almost a year for political purposes before it was filled.

We remember when President Obama, in the last year of his Presidency, offered the nomination of Merrick Garland, a highly respected circuit court judge for the District of Columbia. Do you remember what this Republican leader, Senator McConnell, did in response—this man who so admires this pillar of the American Government, the judiciary? He refused to even personally meet with Merrick Garland, President Obama's nominee, and he instructed his colleagues on the Republican side to do the same, to shun him, to give him the cold shoulder, and to make it clear that, for a year, there would be a vacancy in the Court because he, Senator McConnell, was praying he would get a political opportunity to fill that vacancy if a Republican were elected to the Presidency. And, of course, that is what happened in 2016.

So for Senator McConnell to come before us and talk about his respect for the Court, keeping politics out of the Court, calling it a pillar of the American Government—has he forgotten what he did to Merrick Garland?

Incidentally, despite his constitutional contortion that, for some reason, in the last year of a Presidency, that President has given up any constitutional right to fill a vacancy, Senator McConnell was recently asked: Well, what if that happens in the last year of President Trump's administration?

Well, he wasted no time saying: Of course, I would let President Trump fill the vacancy—as transparent as possible his partisan motives when it comes to that Supreme Court.

So if he wants to show respect for the Court, it certainly has not been demonstrated, starting with the vacancy of Justice Scalia.

And how about Senator McConnell's single-minded effort to fill every Federal vacancy across the United States as quickly as possible, sadly, with many men and women who scarcely have any experience of service in our judicial system?

So far, President Trump has sent to this Senate, with Senator McConnell's acceptance and approval, nine nominees for the Federal Judiciary who have been found "not qualified" by the American Bar Association, many of them unanimously—nine men and women who have such extreme backgrounds or such limited experience that they shouldn't sit on the Federal bench. But Senator McConnell, with

his respect for the judiciary, couldn't wait to give them lifetime appointments.

Oh, you ask: Wait a minute. What about President Obama? How many did he send to the Senate who were found "not qualified" by the American Bar Association? None. None, not one.

That is what we are facing here with Senator McConnell's singular strategy to fill the courts with people who share his extreme views on women's healthcare, on civil rights, and on so many other fundamental issues.

So preaching on this floor about your respect for the Supreme Court, your respect for our Federal judiciary doesn't go very far when you take a close look at the record that Senator McConnell has written.

At this point, let me suggest that we move forward from this day and not dwell on what the morning headlines might be. We have work to do, and it would be better if we did it in a bipartisan fashion, with respect for one another.

I stand ready to work with those on the other side of the aisle to achieve that goal, but I want to say at this moment that dwelling on this particular chapter doesn't serve the American people. They didn't send us here to squabble and fight. They sent us here to pass important legislation that respects their right to quality, accessible, and affordable healthcare. They sent us here to make sure that women have the basic constitutional right to make the most important personal decisions of their lives. They sent us here to make sure that we serve this country in giving working families a fighting chance. All of the other things that we spend time talking about on this floor diminish in comparison.

It is time for us to roll up our sleeves and let the Senate be more than a rubberstamp for Federal judicial nominations when there are partisan goals in mind by Senator McConnell and others.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. THUNE. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUPREME COURT

Mr. THUNE. Madam President, as I begin this morning, I want to associate myself with the remarks of the Republican leader, Senator McConnell, earlier this morning.

The attacks that were made by the Democratic leader, Senator Schumer, on the Supreme Court yesterday were not only irresponsible; they were reckless and they were shameful. I think we need to just call that what it is.

For them to suggest—for him to suggest—that this isn't what he meant and that this is somehow manufactured

outrage on the part of us or Republicans in general doesn't fit with the way that these comments came across either, because I want to read for you from the CNN Supreme Court reporter: "Schumer, speaking at a rally of abortion rights supporters, appeared to threaten Kavanaugh and Gorsuch, President Trump's two Supreme Court nominees who were confirmed after bruising nomination fights."

That is the interpretation not of FOX News but of CNN.

I think we need to be very clear: When comments like that are made that threaten an independent judiciary in this country, they need to be called out and they need to be walked back. I appreciate the fact that the Democratic leader acknowledged today that he should have said it differently, but it doesn't in any way diminish what was said or the context in which it was said or the attacks that were made on the Supreme Court.

It needs to be recognized as that, and I think all of us need to be, as U.S. Senators, aware—aware—no matter what the audience, particularly when you are the Democratic leader, of how these things come across and what they mean to the people who have been threatened by them.

CORONAVIRUS

Madam President, I am pleased that Republicans and Democrats in both Chambers have quickly come together to provide emergency funding to combat the coronavirus, and I look forward to voting this afternoon to send this important funding measure to the President's desk.

5G

Madam President, on another subject, our Nation is poised for the widespread deployment of the next generation of internet technology: 5G. With its incredible speed and connectivity, 5G will usher in a new era of innovation. Advances in medical care, the large-scale deployment of precision agriculture, safer transportation technologies—5G will bring all of these things and more.

But, like any new technology, 5G networks will present new risks and vulnerabilities. Because 5G will mean a vastly greater number of connected devices, the risks with 5G will be greater. That is why an essential part of deploying 5G networks has to be looking at how we can mitigate security risks.

Yesterday, the Senate Committee on Commerce, Science, and Transportation, of which I am a member, held a hearing on supply chain risks for 5G. We need to ensure that the component parts of our devices and, critically, the component parts of telecommunications networks, like cell towers and the small cells that will be required for 5G, are secure.

That means ensuring that 5G equipment comes from trusted vendors. Currently, one of the biggest suppliers of 5G equipment worldwide is a Chinese company—Huawei—which is supported by the Chinese Government. American

security officials have raised concerns that much of Huawei's equipment is built with "backdoors," giving the Chinese Government access to global communications networks.

The United States has taken a number of steps to prevent equipment from Huawei and another suspect Chinese company, ZTE, from being used in U.S. communications networks, but these companies still pose a risk to the United States. For starters, some U.S. broadband providers, often in rural areas, still have equipment from Huawei and ZTE in their communications networks, and a number of our allies and trade partners, entities with whom we regularly share information including sensitive national security information—have used or are using technology from Huawei and ZTE.

Yesterday's Commerce Committee hearing focused on both of these issues. We discussed so-called "rip and replace," an initiative already underway to replace suspect telecommunications components with hardware from trusted companies.

Last week, the Senate unanimously passed the Secure and Trusted Communications Networks Act, which is now with the President to be signed into law. This legislation will help telecommunications providers with the cost of replacing network components that pose a security risk. I cosponsored this legislation, which was developed by Commerce Committee Chairman ROGER WICKER.

Madam President, cost is a major obstacle for small broadband providers when it comes to replacing telecommunications hardware, but, as one expert witness at the hearing noted, a lack of qualified telecommunications workers also poses a barrier to replacement.

I recently introduced legislation, the Telecommunications Skilled Workforce Act, to help increase the number of workers on the frontlines of replacing this equipment and deploying new, secure 5G networks. I hope this legislation will quickly make its way through the Senate. Replacing problematic hardware in our domestic telecommunications networks will help ensure the security of our communications for years to come.

As I said earlier, that is not the only challenge that we are facing. We regularly exchange information, including sensitive national security information, with our allies and trading partners, and this information can only be secure if networks on both ends are secure. That is why the United States has called for other countries to reject telecommunications technology from Huawei and ZTE. While some countries have committed to using trusted companies to build out their telecommunications networks, other countries are still planning to make use of Huawei's technology.

That is why I am introducing legislation today to make telecommunications security a key objective when negotiating future trade deals. This legislation is critical as the United States begins formal trade talks with the United Kingdom and with other allies. We should be using trade agreements to push for enhanced network security globally, which would benefit not only our country but every country with which we do business.

As one witness noted at yesterday's hearing, this legislation is "long overdue." I could not agree more. Over the past few years, we have talked a lot about the importance of having the United States win the global race to 5G. There are important reasons for that. For starters, having the United States at the forefront of 5G technology will mean big benefits for our economy and for American workers, but there are also important security reasons to have the United States at the head of the 5G revolution. If we lead the world in implementing 5G, we will have the chance to set standards for 5G deployment-including, most importantly, network security stand-

It is no exaggeration to say that having the chance to set worldwide standards for 5G is critical—it is critical—to our national security. Our telecommunications networks already play a huge role in our national security, and that role will only grow as we fully adopt 5G technology. We need to ensure that U.S. networks are as secure as it is possible for them to be.

I appreciated the witnesses who took the time to address the Commerce Committee yesterday. There is no better way to learn what needs to be done for 5G security than to hear from the people on the ground who spend every waking day managing network security issues. I look forward to continuing to work with all of my colleagues in the Senate to advance telecommunications security and ensure that the United States is fully prepared for the 5G future.

I yield the floor.

I suggest the absence of a quorum.
The PRESIDING OFFICER. The

clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. GRAHAM. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mr. BRAUN). Without objection, it is so ordered.

CORONAVIRUS

Mr. GRAHAM. Mr. President, later in the day, I will be making a motion to table the Paul amendment that would require offsetting the \$7.76 billion for the coronavirus against the foreign operations account.

Senator PAUL is at it again. He is consistent. I respect his view; I just reject it. What he would be doing is basically upending the fiscal year 2020 agreement on foreign assistance spending passed by Congress and signed into law by President Trump. He would be putting our Nation at risk if this amendment actually passed.

One percent of the Federal spending is foreign assistance in different fashions and ways, including our commitment to our friends in Israel and other programs we have that I think are national-defense oriented.

The U.S. Global Leadership Coalition—consisting of 500 businesses, NGOs, military, and faith leaders—has warned that "cuts of this magnitude would have devastating consequences on our ability to confront unprecedented global challenges—including countering China's growing influence around the world, supporting partners in the fight against extremism, and addressing the impacts of the Venezuelan refugee crisis on key allies like Colombia."

I would even go further: This cut would devastate the foreign assistance account in terms of being able to deal effectively with the effects of the virus overseas.

David Beasley, head of the World Food Programme, warned in an AP article, which I would like to make part of the RECORD, that "if the coronavirus continues to create panic around the world, and there is an economic downturn, I have been telling European leaders, and leaders around the world, you don't have enough money set aside to address the needs in Africa, East Africa, West Africa, in the Middle East right now."

We are only beginning to understand the cost associated with the virus.

I want to compliment Senators SHELBY and LEAHY for putting this package together. I compliment the White House, the Senate, and the House. There was a huge vote in the House.

If we accept Senator PAUL's offset amendment, we will be devastating our ability as a nation to deal with this matter overseas.

As to Senator Paul's world view, I have consistently rejected it. When it comes to international terrorism, I have no desire to go back to the pre-9/11 footprint of where we ignore problems over there, hoping they will not come here. When it comes to fighting disease and containing viruses, I think we understand that we have to be present over there, and in an effective way, to control the spread of the coronavirus, Ebola, and other diseases that can make their way to America.

We have always rejected these types of offsets by Senator PAUL. I think the best thing we can do is have an overwhelming bipartisan vote. Count me in for dealing with the deficit, but this is penny wise and pound foolish because the \$7.6 billion, if it is taken out of the foreign operations account, makes this country less safe on multiple fronts.

I will be making a motion to table at the appropriate time. And I urge my colleagues to understand that what happens over there matters to us over here. This would devastate programs like the Benjamin Gilman International Scholarships and participant schools like Berea College and Western

Kentucky University. There is a ripple effect of enormous proportions. It is not going to do much for the debt, but it will do a lot to make us less safe.

I yield to Senator LEAHY.

Mr. LEAHY. Mr. President, my friend and colleague on the floor—I totally agree with what he just said. Senator SHELBY and I will be giving longer statements in a few minutes.

Senator GRAHAM and I have had the duty to put through the Foreign Operations bill for a number of years now. We tried to do it in a bipartisan and nonpartisan way, and as a result, it has gotten very strong support from both sides of the aisle, which is what we hope will happen now.

I will certainly be voting with Senator Graham's motion to table when he makes it. Every Senator-he or shecan vote any way they want, but I would note for our colleagues, Senator SHELBY and I and key Senators-including the Senator now on the floorin both parties have worked every day, every evening, our staffs on weekends, in order to get to where we are. This is a product of every single Republican, every single Democrat who wanted a voice in this, a chance to speak to it. Both Senator SHELBY, as chairman, and I, as vice chairman, made sure that voices were heard.

I yield the floor.

Mr. GRAHAM. I would like to again compliment you and Senator SHELBY. You always deliver. You always seem to be able to do things that other people can't do at a time when we need you to deliver for the body and the country.

Mr. President, I would like to have printed in the RECORD an article, "UN food aid chief fears for Africa, Mideast amid new crises," and a U.S. Global Leadership Coalition letter, dated March 5, 2020.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

UN FOOD AID CHIEF FEARS FOR AFRICA, MIDEAST AMID NEW CRISES [March 5, 2020]

AMMAN, JORDAN (AP)—The head of the U.N.'s food aid agency warned of "absolute devastation" in Africa and parts of the Middle East in coming months if wealthier nations grappling with an economic downturn linked to the new coronavirus don't step up aid efforts in countries in need.

David Beasley, head of the World Food Program, told The Associated Press that the convergence of several crises could further destabilize conflict-scarred regions.

"If the corona virus continues to create panic around the world, and there is an economic downturn, I have been telling the European leaders, and leaders around the world, you don't have enough money set aside to address the needs in Africa, East Africa, West Africa, in the Middle East right now," Beasley said during an interview in Jordan late Wednesday, after a visit to Syria.

"If there is an economic downturn, on top of the economic downturn that exists now in Syria and Lebanon, it absolutely could be a catastrophe," he said. "I mean absolute devastation. I am very concerned about what would happen in the next six months. You could see destabilization unlike any time period, maybe in my lifetime."

In the Middle East, Iran has been hardest hit by the new virus which has spread around the globe after first being detected in the Chinese city of Wuhan late last year. There are over 3,740 cases of the virus across the Mideast, with most linking back to the Islamic Republic which also confirmed dozens of deaths. Only a small number of cases has been reported in Sub-Saharan Africa so far.

Beasley did not give an amount for additional aid needed, but suggested it would be in the billions of dollars. Beasley spoke after a tour of Syria's northwestern Idlib province, the country's last rebel stronghold, where hundreds of thousands of civilians have been displaced in recent weeks by a Russian-backed Syrian government offensive.

U.N. agencies, including the WFP, are distributing aid in ldlib, but are often hampered by logistics problems, including shifting front lines, access restrictions and roads clogged by large numbers of people on the move.

The leaders of Russia, which backs the Syrian government, and Turkey, which backs the rebels, were meeting in Moscow on Thursday to try to avert further calamity. But any deal will likely bring only a temporary halt in the punishing offensive by the military of Syria's President Bashar Assad, which threatens continued suffering for the 3 million people trapped in Idlib.

Beasley appealed to leaders on all sides of the Syrian conflict to end the war, which has raged for nine years. "Enough is enough," he said. "Too many people have suffered too long."

U.S. GLOBAL LEADERSHIP COALITION, March 5, 2020.

Hon. LINDSEY GRAHAM,

Chairman, Subcommittee on State-Foreign Operations, Committee on Appropriations, U.S. Senate, Washington, DC.

Hon. PATRICK LEAHY,

Ranking Member, Subcommittee on State-Foreign Operations, Committee on Appropriations, U.S. Senate, Washington, DC.

DEAR CHAIRMAN GRAHAM AND RANKING MEMBER LEAHY: On behalf of the more than 500 business and NGO members of the U.S. Global Leadership Coalition {USGLC}, including business, military, and faith-based leaders in all 50 states, I write in strong opposition to an amendment proposed by Senator Rand Paul that would offset emergency funding to address the growing coronavirus threat by canceling over \$8 billion in congressionally approved funds for the International Affairs Budget.

If enacted, this amendment would cancel critical funding for State Department, USAID, and other development programs around the world, undermining our national security and economic interests and placing America's global leadership at risk. Cuts of this magnitude would have devastating consequences on our ability to confront unprecedented global challenges—including countering China's growing influence around the world, supporting partners in the fight against extremism, and addressing the impacts of the Venezuelan refugee crisis on key allies like Colombia.

There is a strong bipartisan legacy in the Senate of rejecting deep and dangerous cuts to America's development and diplomacy programs. I urge the Senate to once again take decisive action and reject Senator Paul's shortsighted amendment. Doing so will ensure that resources already approved by Congress can be fully deployed to support cost-effective programs that advance America's interests.

Thank you for your unwavering support of America's international affairs programs and

your commitment to strengthening the critical resources needed to advance America's global leadership.

Sincerely,

LIZ SCHRAYER, President & CEO, USGLC.

Mr. GRAHAM. Mr. President, I wrap up by saying that Senator PAUL is consistent. Every time he wants to pay for something, he comes to the foreign assistance account. I understand the argument: Why are we spending over there when we have problems here? That sounds good until you realize how the world is

On September 10, 2001, the day before 9/11, we didn't have one soldier in Afghanistan, not an embassy, not an ambassador, not a dime of aid. The Taliban were in charge, and they gave al-Qaida safe haven. That is where the planning of the attacks and 9/11 originated. Looking back, wouldn't it have been nice to have had some influence in Afghanistan on September 10?

All I can say is, I will never go back to that pre-9/11 mindset of ignoring the world, because I have learned, like most Americans, the world can come here in a very bad way or very good way, depending on how we defend ourselves.

This 1 percent of the budget—foreign assistance to deal with problems over there—is absolutely essential in terms of global health. He exempted the global health component of the foreign assistance account, but the money—\$7.76 billion—will destroy other things in the account that I think are vital to our public health here and our national security and our alliances. You cannot fight problems like this by yourself. You need partners. You need to get involved over there so the virus doesn't spread any more here than necessary.

I hope that people will listen to what Senator Leahy just said, that this was a negotiated agreement. We all came together to get a budget. Senators Shelby and Leahy did a wonderful job working with the House and the White House to get us to where we are today. This amendment would upset everything. I am going to move to table it at the appropriate time.

With that, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. CARDIN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

CORONAVIRUS PREPAREDNESS AND RESPONSE SUPPLEMENTAL APPROPRIATIONS ACT, 2020

The PRESIDING OFFICER. Under the previous order, the Senate will proceed to the consideration of H.R. 6074, which the clerk will report.

The legislative clerk read as follows: A bill (H.R. 6074) making emergency supplemental appropriations for the fiscal year ending September 30, 2020, and for other purposes.

The PRESIDING OFFICER. The Senator from Maryland.

TRUE EQUITY ACT

Mr. CARDIN. Mr. President, at the end of fiscal year 2021, the 5-year authorization for the Elementary and Secondary Education Act, our Nation's foundational prekindergarten through 12th grade law, is due to expire.

While I understand that previous reauthorizations took 13 years and allowed an entire generation of students to matriculate through school systems around our Nation, I am here today to stress that our kids can't wait for the needed transformational changes to our Nation's Federal, State, and local education policies and additional funding investments.

To provide a stronger Federal partnership to States and local communities that have worked together to support transformational change that will ensure educational equity and quality for all public school students, I introduced the TRUE EQUITY Act. It stands for the Transformational Reforms and Updates to Ensure Educational Quality and Urgent Investments in Today's Youth Act.

My home State of Maryland has been long recognized as having one of the best public school systems in the country, according to the independent newspaper Education Week. This ranges from having entire countybased local school systems ranked as near the top in the Nation to individual schools producing national leaders in academic achievement. In addition, Maryland was one of the first States to offer half-day preschool for 4year-olds, has broad access to Advanced Placement courses for high schoolers, and pays for dual-enrollment courses for high school students at our local community colleges.

I am proud of these accomplishments. However, not all of our students have found success.

In 2016, the Maryland General Assembly and the Governor of Maryland established the Maryland Commission on Innovation and Excellence in Education, chaired by the former chancellor of the University System of Maryland, William "Brit" Kirwan, to identify the policies and practices so that Maryland's schools perform at the level of the world's highest performing school system. The commission was charged with a number of tasks, including a review of the current funding formulas and accountability measures utilized to ensure educational equity and equality, how Maryland schools prepare students for postsecondary education in the workforce, and to make recommendations for the State on needed funding improvements across the State and local school districts

These reviews are necessary to support growing populations of children with disabilities, how to improve and expand programs supporting postsecondary credential attainment, and

other policy changes to address the academic achievement gap that has persisted along racial, ethnic, and income levels of students of color and low-income students compared to their higher income and White peers.

To meet this expansive charge, the commission included stakeholders from across our State, including representatives of the Maryland General Assembly, including our now speaker of the Marvland House Delegates and our now State Senate president, the Governor's office, county elected leaders, education leaders, including State and local school board representatives, our State and local superintendents. leader of our State's public university system, teachers, business leaders, and leading education advocacy organizations, such as the Maryland State Education Association, Maryland Parent Teacher Association, and Maryland Family Network.

In addition to the members of the commission, the commission actively sought input from the public with numerous meetings soliciting public comment held across our State. In January 2019, the commission unanimously released their interim report that found Maryland students scored in the middle of the pack on the National Assessment of Educational Progress, known as the "Nation's report card," which is given to representative samples of 4th, 8th, and 12th graders in every State.

The gaps in achievement between socioeconomic, racial, and children with disabilities were far too large in a State like Maryland that has committed resources and established policies that are meant to provide a worldclass public education system.

The commission also reported that less than half of kindergartners entering our school system were ready to learn, and fewer than 40 percent of students who are graduating from high school truly are "college or career ready." This is in spite of the estimates that by 2022 nearly two-thirds of the jobs in Maryland will require at least postsecondary credentials, whether they be nationally recognized industry certificates or 2-year or 4-year college degrees.

For instance, in 2017, just under half of all students across Maryland high schools received a proficient score on their English 10 exam. That exam helps evaluate the students' readiness for college or career. Disaggregated data shows the continued struggle to close academic achievement gaps among racial and socioeconomic groups. Along racial lines, 77 percent of Asian students and 67 percent of White students were proficient. However, only 34 percent of Hispanic students and 29 percent of African-American students earned proficiency scores.

The commission's interim report highlighted that despite Maryland being ranked as one of the top five States with the highest household median income, a large number of Maryland students are living in poverty. Forty-three percent of Maryland students are low income and eligible for free or reduced-price school meals, meaning that they come from families at or below 185 percent of the Federal poverty line. For every 10 public schools across our State, there is a concentration of poverty where enrollment consists of at least 55 percent of students living in poverty. These schools are in all of our subdivisions except one.

In 15 percent of Maryland schools, at least 80 percent of children are low income. Students attending schools with a concentration of poverty receive less funding per pupil than other school districts. For example, 53 percent of African-American students attend schools with concentrations of poverty, while only 8 percent of White students attend these schools.

The academic achievement gap between Maryland students with means and our low-income students is stark. On the English 10 exam, 62 percent of economically advantaged students earned a passing score, while 28 percent of those students who are on free and reduced-price meals were deemed proficient. These statistics are stark. We know we have a problem. We have to deal with it.

The commission reported that these academic achievement disparities continued into college enrollment, with fewer students of color and low-income students enrolling in college than their higher income and White peers.

We will find similar numbers throughout our Nation. We need to do something about this. Concerns about the state of education in Maryland was not limited to student performance. The commission's interim report also found that students face a rotating carousel of teachers throughout their time in schools. With the average salary for teachers in Maryland approximately 25 percent less than professionals with comparable levels of education, it is difficult to attract to the profession. Sixty percent of our new teachers are recruited from outside our State each year. This is a common problem we have throughout the country.

Once those individuals arrive in the classroom, 47 percent will leave by the start of their third year. The turnover is tremendous. It is salary issues. It is working conditions. It makes it difficult to get the true professionalism and commitments that we need in education. This difficulty in recruiting individuals and the constant churn leaves Maryland students and local education systems facing shortages in critical need areas, such as special education, language, and the STEM fields.

In order to address these inequities in education, the commission unanimously agreed on a proposal with five transformative policy recommendations in their interim report that would provide significant, additional investments in Federal, State, and local funding and modify policies for Maryland's prekindergarten through 12th grade education system.

The five main policy recommendations would first invest in high-quality early childhood education and care through a significant expansion of full-day preschool, to be free for all low-income, 3- and 4-year-olds, so that children have the opportunity to begin kindergarten ready to learn.

Second is to invest in teachers and school leaders by elevating the standard and status of the teaching profession, including a performance-based career ladder and salaries comparable to other fields with similar educational requirements.

Third, it creates a world-class instructional system with an international benchmark curriculum that enables most students to achieve "college or career ready" status by the 10th grade and then pursue pathways to include early college, Advanced Placement courses, or a rigorous technical education leading to industry-recognized credentials and higher paid jobs.

Fourth, it provides support to students who need it the most, with broad and sustained support for schools serving high concentrations of poverty, with after-school and summer academic programs and student access to needed health and social services.

Finally, it ensures excellence for all through an accountability oversight board that has the authority to ensure that transformative education system recommendations are successfully implemented and produce the desired improvements in student achievement.

These reforms would be implemented over a 10-year period, creating a sustained and coordinated effort to transform Maryland's public education system into a world-class system, elevating the teaching profession, and eliminating educational inequities. An independent analysis conducted in November 2019 confirms that the cost to implement the commission's recommendations will pay for themselves shortly after the 10-year implementation period.

Last year, the Maryland General Assembly recognized that our children could not wait to implement the commission's recommendations and established the Blueprint for Maryland's Future to lay the groundwork for the implementation of the commission's recommendations.

Starting this year, the Blueprint for Maryland's Future is assisting low-income families' access to expanded services and early childhood education, including free prekindergarten for 3- and 4-year-olds from low-income families.

The Blueprint for Maryland's Future is assisting in the recruitment of new teachers to the profession through increased teacher pay and career ladders for exiting teachers to help train the next generation. A newly established career readiness standard will allow Maryland high school students to succeed in dual-enrollment courses offered by local community colleges.

The "Blueprint" addresses Maryland's education formulas to better

target resources to students who need additional assistance, including children with disabilities, English learners, and students in schools with high concentration of poverty. This is all done while increasing accountability to ensure that the additional investments are properly implemented and help our students succeed.

That is the path that we are on. I agree with advocates and elected leaders who understand our kids cannot wait for adoption of these recommendations at some point in the future. We need to act now. We need to implement these recommendations now and view them as a national model for other States to aspire to. Without transformative change, we will continue to hope for significantly different results with only incremental changes, or we can be bold and change the future of our children and our country and every child with the high-quality education skills training that they need to be successful and climb out of povertv.

I reject the arguments from those who would claim that the recommendations are too costly to implement. Without the full implementation of the commission's recommendations, we are failing in our primary goal in government of providing a better future for our children, allowing them to slip behind their national and international peers.

These arguments also fail to see that the investments in our children can lead to a lifetime of reduced costs in public safety and healthcare costs, as children can grow and support themselves and their future families through the education they receive in public schools. These investments will pay back dividends in a stronger economy that will benefit all of us.

I believe we should not allow States and local communities to make these transformative changes on their own. The Federal Government should be a strong Federal partner in ensuring accountability and in addressing educational inequities for our children.

That is why I introduced the TRUE EQUITY Act. This legislation, which is purposely modeled after the commission's recommendation, establishes four new, supplemental Federal grant opportunities for State and local school districts that are committed to addressing educational inequities while holding States and local school districts accountable for failing to properly support their students.

In strengthening the Federal Government's commitment as a partner in education, the four new TRUE EQUITY grants would provide an additional \$1 of Federal funds for every \$2 of State and local funds that are committed to education beyond their fiscal year 2019 spending levels.

State and local school districts that receive grants would be required to meet a maintenance of effort to ensure that the State and local educational spending is maintained and would not allow the Federal Government's funding to backfill reductions in State and local commitments to educational funding.

As a requirement to receiving one of the four new TRUE EQUITY grants, a State would be required to have an independent oversight board to ensure that the State and local districts would be meeting their State-designated educational equity goals, and the oversight board would have the ability to hold the State and local school districts accountable for not meeting their targeted goals.

These grants are flexible to allow local communities to meet their needs over a several-year period, whether it be through the establishment of a college and career readiness pathway to support a high school student's dual enrollment at a local community college and provide a jump-start on college; additional funding to expand the number of early learning hubs in the State—in Maryland, these are known as Judy Centers—or training for teachers on how to address the needs of our children with disabilities.

As Congress begins to look at the next reauthorization of the Elementary and Secondary Education Act, I urge my colleagues to listen to the voices of the Marylanders across our State who know that our kids can't wait for the implementation of these recommendations and support the TRUE EQUITY Act.

I congratulate the members of the commission who thoughtfully researched and crafted this national model for States to be able to see transformative change and raise their educational systems to that of a world-class school system. We owe our children nothing less than to provide them with the best possible outcome in our Nation's public schools.

I suggest the absence of a quorum.

The PRESIDING OFFICER (Mr. SCOTT of Florida). The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. PAUL. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

AMENDMENT NO. 1506

Mr. PAUL. Mr. President, I call up my amendment, No. 1506, and I ask that it be reported by number.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows: The Senator from Kentucky [Mr. PAUL] proposes an amendment numbered 1506.

The amendment is as follows:

(Purpose: To rescind unobligated balances for certain international programs to offset the amounts appropriated in this bill to respond to the coronavirus outbreak)

At the appropriate place, insert the following:

SEC. ___. RESCISSIONS.

(a) EDUCATIONAL AND CULTURAL ASSIST-ANCE PROGRAMS.—Notwithstanding any other provision of law, all amounts made available for fiscal year 2020 for the East-West Center under title I of the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2020 (division G of Public Law 116-94), the Inter-American Foundation under title III of such Act, and educational and cultural exchange programs under title I of such Act that remain unobligated as of the date of the enactment of this Act are rescinded.

(b) Proportional Rescissions of Other Unobligated Discretionary Appropriations —

(1) IN GENERAL.—Except as provided under paragraph (2), after rescinding the amounts required under subsection (a), the Director of the Office of Management and Budget shall rescind, on a proportional basis, such amounts as may be necessary to fully offset (in conjunction with the rescissions under subsection (a)) the amounts appropriated by this Act from the unobligated amounts appropriated for fiscal year 2020 for—

(A) the Economic Support Fund under chapter 4 of part II of the Foreign Assistance Act of 1961 (22 U.S.C. 2346 et seq.); and

(B) the United States Agency for International Development.

(2) EXCLUSIONS.—In making the rescissions required under paragraph (1), the Director shall not rescind any amounts appropriated for—

(A) global health programs under title III of the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2020 (division G of Public Law 116-94); or

(B) assistance to Israel.

Mr. PAUL. Mr. President, my amendment would pay for the emergency funds for the coronavirus.

I think that we should not let fear or urgency cause us to lose our minds and cause us to act in an irresponsible fashion. I, for one, have looked at foreign aid over the years as welfare that we send to other countries that really is not particularly in our best interests anyway. If you follow foreign aid through the years, what you will find is that it goes from middle-class folks in rich countries to rich people in poor countries. Frankly, people enrich themselves at our expense. They steal our money. The Mubarak family in Egypt is now worth billions of dollars, which it skimmed off the top. The history of this throughout the Third World is legion and is well known.

My amendment would basically take the \$8 billion from the welfare we give to foreign countries in order to pay for this. I see no reason we shouldn't do this. I am not opposed to the emergency funding, but I think that the emergency funding should be gotten from elsewhere in the budget and that this is the responsible way to act.

Every day, people across the country are confronted with unexpected expenses. We budget and we plan, but things happen. When they do, we adjust and plan accordingly. Sometimes we confront an expense that is not only unexpected but is urgent, and that is where we find ourselves today. We want to respond and make sure we are providing resources to our medical professionals and researchers. That is important, and I fully support that, which is why we should use this moment to

ask ourselves whether it is really necessary to keep spending on wasteful things.

If we don't consider this now, when will we ever consider this?

We want an all-hands-on-deck response, so we should be cutting out waste and moving those resources to something that is of more immediate concern. So, if the coronavirus is of immediate concern—and I think it is—let's address that situation now, but let's do so by taking money from less urgent things and money that we are wasting overseas—money that is often stolen by Third-World dictators. That is exactly what I am proposing today.

We have the money. We don't need to borrow more money. We just have to start setting our own priorities. For example, we shouldn't spend another dollar in developing a foreign economy this year. That spending should be stopped, and the money should be spent here to buy supplies, to help expedite research, and to support our communities. The funds I am proposing to keep at home have been used abroad for all kinds of unnecessary and wasteful things. I will give you a few examples.

We send U.S. taxpayer dollars to fund kids from Pakistan to go to space camp in America. We spend money on combating student truancy in the Philippines. We have been funding the Peruvian Green New Deal. We actually send money to help deported illegal immigrants start up businesses in El Salvador. What business is it of the U.S. taxpayer to be funding small businesses in El Salvador for people who broke the law by trying to break into our country? It is insane. At this point in time, I think this money would be better spent on research on the coronavirus and on a response to this epidemic should it become worse in our country.

The list doesn't stop there. I don't know why we can't agree to spend this money on the coronavirus instead of spending it abroad. We spend over \$50 billion a year in Afghanistan—building their roads, building their schools, trying to create a nation where there really is no nation. We need to spend that money here at home. Besides, it is the law.

We have a law called pay-go, or pay as you go, which is supposed to require Congress to pay for new spending. It has been around for a couple of decades. Yet we have broken the law thousands of times. What do they do? They see something they want. You know, they are kids in a candy store. They want to spend. They want to give you, give you, give you free money, so they just ignore the law. So what happens every year is that they exceed the payas-you-go, and they don't do the thing they are supposed to do, which is to offset this with a spending cut. Then they just write a small, little note in there, reading they have agreed to ignore the pay-go rules again. That is what will happen in this case.

The other way they ignore the rules on pay-go is they declare things to be emergencies, so everything is an emergency. They say: Well, what would we do if we didn't have this—if it weren't an emergency?

We already spend billions of dollars and have spent billions of dollars over the years to prepare for epidemics. We fund the CDC, and we fund the NIH. There is a lot of money out there.

Once again, I am not against giving additional money, but we should just make a decision. We should be mature people and say we are not just going to print up the money or borrow it from China but are going to take it, maybe, from something less necessary.

When we don't want to pay for new spending, we just simply waive these rules on pay-go. We declare the spending to be emergency, and we get around the requirement. That is how we got a \$23 trillion debt. We actually borrow \$2 million every minute.

People say: Well, we have to do something. People are running around, acting crazy—we have to do something. Well, who is going to do something about the \$23 trillion debt?

Do we not have 5 minutes to take a vote? In 15 minutes, we will be taking this vote, and people could simply vote and say that we are not going to borrow more money and that we will take the money from somewhere else in the budget that is less pressing.

Mark my words—there is no fiscal responsibility up here among either party. It will be a small minority of us who will say that this funding should be offset by taking it from somewhere else in the budget.

In times of emergency, Congress scrambles to put together new spending, but we should be working just as hard to pay for the cost that comes with emergencies.

Which is a higher priority—spending millions of dollars to stabilize the supply chain of medical supplies and treatments here at home or spending millions on international arts festivals? Which is a higher priority—spending millions to train frontline medical professionals here at home on how to limit exposure to the coronavirus or spending millions of dollars, if not billions of dollars, paving roads in Afghanistan? My amendment gives us a chance to set priorities.

We can support our communities and give our medical system the resources its needs, and we can do it without adding to the debt. That is the responsible way. My amendment would do exactly that, and I encourage the other Senators to consider fiscal responsibility.

I thank the Presiding Officer.

The PRESIDING OFFICER. The Senator from Vermont.

Mr. LEAHY. Mr. President, I know other Senators have already spoken on this, but I would hope Members would oppose the Paul amendment.

The amendment would cut, among other things, \$7.3 billion from the Department of State and the USAID. It

would decimate programs that fund the foreign policy priorities of both the administration and the Congress. A cut of that size would be about two-thirds of the total funding appropriated for these purposes, some of which has already been spent.

I remember when James Mattis was the Secretary of Defense. He is a man I admire for his work as a four-star general with the Marine Corps and as Defense Secretary. He is not a man who looked at the world or the needs of our military in an abstract fashion; he dealt with it every day. He came before our Committee on Appropriations and said: If you want to cut foreign aid, buy me more bullets.

He made it very clear that there are areas in the world where what we do keeps us from having to go to combat.

The Paul amendment would practically eliminate the remaining budget for programs to strengthen democracy, combat corruption, promote economic growth, improve water and sanitation, aid victims of war and natural disasters, and support our allies and partners in countless ways.

The reason the State Department and USAID need supplemental funds is that the resources provided in fiscal year 2020 are not sufficient to meet the unanticipated public health, economic, and humanitarian challenges presented by the coronavirus. Yet the Paul amendment would cut billions from the same accounts for which additional resources are needed.

The funding for the programs that would be cut by the Paul amendment is how we make our presence felt around the world. It actually totals less than 1 percent of the Federal budget.

Senators of both parties—of both parties—voted overwhelmingly to include this funding in the fiscal year 2020 State, Foreign Operations appropriations bill

In case anybody has forgotten when that was, that was just 3 months ago.

The Paul amendment would also eliminate \$475 million that Congress enacted less than 3 months ago for educational and cultural exchanges, including \$160 million for the Fulbright Program—so no more Fulbright Program, no more International Visitors Program, no more exchange programs for young leaders in Africa, Southeast Asia, or Latin America. These programs enrich the lives of Americans and directly benefit the economies, in every State of the Union, and create lasting ties between U.S. and foreign communities, universities, and governments—but not if the Paul amendment passes.

The amendment would eliminate all funding for the Inter-American Foundation, which, with a budget of just \$37 million, supports hundreds of projects to combat poverty in Latin America and the Caribbean

It would eliminate funding for the East-West Center, which has a long history of strengthening relations and building understanding between the United States and the Asia/Pacific countries

Both the Inter-American Foundation and the East-West Center were established by acts of Congress. It is in our national interest to fight poverty in Latin America and support engagement with countries in the Far East.

The coronavirus represents a serious public health threat. We have to respond now. We have to treat this as the emergency it is.

Mr. President, I ask unanimous consent that a letter from the U.S. Global Leadership Coalition, addressed to Senator Graham and myself—incidentally, they represent more than 500 U.S. business and nongovernmental organizations—opposing this amendment be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

U.S. GLOBAL LEADERSHIP

COALITION, March 5, 2020.

Hon. LINDSEY GRAHAM,

Chairman, Subcommittee on State-Foreign Operations, Committee on Appropriations, U.S. Senate, Washington, DC.

Hon. PATRICK LEAHY,

Ranking Member, Subcommittee on State-Foreign Operations, Committee on Appropriations, U.S. Senate, Washington, DC. DEAR CHAIRMAN GRAHAM AND RANKING

DEAR CHAIRMAN GRAHAM AND RANKING MEMBER LEAHY: On behalf of the more than 500 business and NGO members of the U.S. Global Leadership Coalition (USGLC), including business, military, and faith-based leaders in all 50 states, I write in strong opposition to an amendment proposed by Senator Rand Paul that would offset emergency funding to address the growing coronavirus threat by canceling over \$8 billion in congressionally approved funds for the International Affairs Budget.

If enacted, this amendment would cancel critical funding for State Department, USAID, and other development programs around the world, undermining our national security and economic interests and placing America's global leadership at risk. Cuts of this magnitude would have devastating consequences on our ability to confront unprecedented global challenges—including countering China's growing influence around the world, supporting partners in the fight against extremism, and addressing the impacts of the Venezuelan refugee crisis on key allies like Colombia.

There is a strong bipartisan legacy in the Senate of rejecting deep and dangerous cuts to America's development and diplomacy programs. I urge the Senate to once again take decisive action and reject Senator Paul's shortsighted amendment. Doing so will ensure that resources already approved by Congress can be fully deployed to support cost-effective programs that advance America's interests.

Thank you for your unwavering support of America's international affairs programs and your commitment to strengthening the critical resources needed to advance America's global leadership.

Sincerely,

LIZ SCHRAYER,

President & CEO, USGLC.

Mr. LEAHY. Mr. President, I do not see another Senator seeking recognition, so I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. GRAHAM. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. GRAHAM. Mr. President, I ask unanimous consent that all debate time be considered expired.

The PRESIDING OFFICER. Without objection, it is so ordered.

MOTION TO TABLE

Mr. GRAHAM. Mr. President, I move to table the Paul amendment, and I ask for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

There appears to be a sufficient second.

The question is on agreeing to the motion.

The clerk will call the roll.

The senior assistant legislative clerk called the roll.

Mr. THUNE. The following Senator is necessarily absent: the Senator from Wyoming (Mr. ENZI).

Mr. DURBIN. I announce that the Senator from Massachusetts (Mr. MARKEY), the Senator from Vermont (Mr. SANDERS), and the Senator from Massachusetts (Ms. WARREN) are necessarily absent.

The PRESIDING OFFICER (Mrs. FISCHER). Are there any other Senators in the Chamber desiring to vote?

The result was announced—yeas 81, navs 15, as follows:

[Rollcall Vote No. 65 Leg.]

YEAS-81

Gillibrand Alexander Reed Baldwin Graham Roberts Barrasso Grassley Romney Bennet Harris Rosen Blumenthal Rounds Hassan Hawley Rubio Blunt Heinrich Booker Sasse Boozman Hirono Schatz Brown Hoeven Schumer Burr Hyde-Smith Scott (FL) Cantwell Inhofe Scott (SC) Jones Shaheen Capito Cardin Kaine Shelby Carper King Sinema Casey Klobuchar Smith Cassidy Stabenow Leahy Collins Manchin Sullivan Coons McConnell Tester McSally Cornyn Thune Menendez Cortez Masto Tillis Cotton Merkley Udall Van Hollen Cramer Moran Duckworth Murkowski Warner Whitehouse Durbin Murphy Feinstein Murray Wicker Fischer Wyden Peters Gardner Portman Young

NAYS-15

 Blackburn
 Ernst
 Loeffler

 Braun
 Johnson
 Paul

 Crapo
 Kennedy
 Perdue

 Cruz
 Lankford
 Risch

 Daines
 Lee
 Toomey

CHANGE OF VOTE

Mr. SULLIVAN. Mr. President, I request unanimous consent that I be permitted to change my vote on the roll-call vote earlier today. The vote was No. 65. I voted no. It was my intention to vote aye. It will not affect the outcome.

The PRESIDING OFFICER. Without objection, it is so ordered.

(The foregoing tally has been changed to reflect the above order.)

NOT VOTING—4

Enzi Sanders Markey Warren

The motion to table was agreed to; the amendment was tabled.

The PRESIDING OFFICER. Under the previous order, the time until 1:45 p.m. shall be equally divided between the leaders or their designees.

The Senator from Washington.

Ms. CANTWELL. Madam President, I come to the floor to speak about the ongoing crisis of the novel coronavirus outbreak and to urge all of us to pass this supplemental as quickly as possible.

As of this morning, there are 163 confirmed cases in 17 States across the country, but no State has been more hard hit than the State of Washington.

We now have 39 confirmed cases of COVID-19 and more than 230 people under public health monitoring. We have lost 10 of our citizens. Our thoughts and prayers are with those families who have lost loved ones, and there are still families who have loved ones in nursing homes and who are trying to make sure they get the appropriate care in this ongoing crisis.

I would also like to thank the workers who are on the frontlines of this healthcare crisis and are doing everything they can to help keep our citizens safe.

What is clear in this supplemental is that we need more resources for testing. The testing capabilities will help our communities understand the community transfer of this virus and what else we need to do to help stop its spread.

Some of the funding in this supplemental can be helpful for our smaller public labs to do more testing to help our public health officials respond to this crisis, and, as I urged yesterday, for the CDC and others to make it clear through our public health sites exactly how the public can go about getting access to testing.

This is so critical because I know there are people in the State of Washington who feel ill, who feel they might be subject to this coronavirus and aren't getting tested. We want to make sure the public clearly understands what their paths are for getting those tests, and we want to make sure that every lab-commercial and academicin the United States is getting prepared to help us in the advent of the spread of this virus. Why? Because helping to identify these early cases is what will help us be successful in understanding these patterns and further the community separations that we need to do.

Why is this so important? Well, today in the State of Washington, they are taking major steps. Major employers are encouraging their employees, if possible, to work from home. These are companies like Microsoft and Facebook and Amazon—major employers.

We have 23 schools that have closed and 2 school districts that are entirely shut down. Why are they doing this? Because they are taking precautions for people who have been exposed to the coronavirus in those schools, and they are doing everything they can to make sure that they respond correctly.

In addition, King County has recommended that anyone over the age of 60, anyone with a preexisting medical condition, or anyone who is pregnant should avoid public places and gatherings as much as possible.

We are taking all these steps now because we are at the epicenter of this crisis, but I want people to know that there are other things that other States can be doing to learn from what we have done in Washington.

The fact is that we had a flu lab that actually was a collaboration among our academic and scientific and health communities to get people who thought they simply had the flu to also be tested, and we found cases of the coronavirus. That actually is something you have to set up and get permission for. I hope that every State will follow suit and set up such a cohort of people working together to share that information so that we can help prevent the spread.

Washington State will receive \$11.5 million in funding to help the Department of Health respond to this crisis. I know the Vice President is visiting our Governor in Olympia, WA, today. I hope these funds in this bill we are passing today will increase access for public lab testing, help pay for isolation and quarantine, help pay for sanitizing in public areas, better track the areas and those who might come into contact with it, help labs that are trying to identify hot spots, and limit exposure.

As part of this package, Washington State will also be helped with reimbursements since the outbreak of this virus—and I can tell you that they are many—and to help us push through the protocols that would help us establish better responses.

Yesterday, we had a hearing in the Aviation Subcommittee to talk about what is needed for an aviation protocol. I know that some airlines in our State are doing everything possible to clean planes on every turn of the trip and to do deep cleaning. They are communicating-and we have encouraged them to communicate more—with their passengers exactly what they are doing to help with the mitigation of this virus. But that is not a substitute for the Department of Transportation, federally, and the CDC, collaboratively, to work in giving guidance to airlines on what standards they should be meeting to help mitigate the spread of this virus.

My colleagues and I are calling on them to do that, not simply to think of this as other agencies' responsibilities but to work collaboratively to get this done.

I want to thank the Appropriations Committee for getting this legislation

to us today and all of our colleagues who have worked so quickly on making it happen. I can tell you that we need these funds; we need them now; and we need other States to heed the early testing that would have been helpful in our State and now may be helpful in yours.

Let's get as aggressive about testing as possible. Let's get aggressive about sharing information about the flu and tracking this virus. Let's get aggressive about trying to mitigate the impacts of this deadly disease.

I thank the Presiding Officer.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. GRASSLEY. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

PRESCRIPTION DRUG COSTS

Mr. GRASSLEY. Madam President, a new study showed that from the years 2007 to 2018, prices for, actually, hundreds of drugs rose many times—many times faster than the rate of inflation. List prices on 602 medicines rose by 159 percent. That would average out to 9 percent annually. After discounts and rebates, net prices increased by 60 percent or 4.5 percent annually. That is 3.5 times the rate of inflation.

These are drugs for multiple sclerosis, cholesterol, rheumatoid arthritis, chemotherapy, diabetes, and many other debilitating and life-threatening conditions. Put into real terms, these price increases mean that if one of these drugs cost \$100 a month in 2007, that same drug would cost \$259 in 2018.

Meanwhile, you have to consider the working American. Wages for the average American over the same time period increased about 30 percent in the private sector. That means wage growth is about half the rate of the growth of prescription drug prices, even after the rebates and even after the discounts.

For many, increased drug costs are wiping out progress that these workers are making in their wages. Some families are even going backward financially after paying for their prescriptions. This doesn't take into account at all the many other increases in the cost of living from college to housing, to insurance.

Now, we Americans are surely fortunate, aren't we, to see the significant wage growth that we have had in this country for our workers under President Trump—great progress.

The President and Republicans in Congress can rightly take credit for the country's booming economy, but all that wage growth doesn't mean much—or at least as much—if it is spent on the same prescription drug refills every month. That is something that ought to concern every Member of this Congress, and for most, I am sure

it does because we hear about it constantly from our constituents. In fact, during this election season, polls show that it is one of the top three or four issues that are most on people's minds.

Let me be clear. These price hikes aren't because the medicines got better or there was a significant increase in research and development. No, this is because the pharmaceutical companies could do it, and in doing it, they could get away with it because, in many cases, consumers don't have a choice; consumers don't have options or alternatives. That is because we don't have a healthy marketplace that drives costs down for pharmaceuticals.

Right now, pharmaceutical companies can essentially charge Medicare whatever they want, and taxpayers don't have much recourse. Right now, every single working American who pays Federal taxes is subsidizing Big Pharma's record profits through the drugs that the Federal Government pays for through various programs like Medicare and Medicaid.

Now, there has to be a solution for this situation, and Ranking Member WYDEN and I are working to put some common sense back into this whole system of buying pills. In the Finance Committee, we have passed bipartisan legislation to put an end to unlimited corporate welfare for Big Pharma. The vote of that bill out of committee was 19 to 9—a bipartisan effort.

We are closer than ever to lowering drug prices for tens of millions of Americans, and these Americans have been crying for this help from Congress for quite a few years. But here we are. Big Pharma and its paid allies are out in force trying to kill any reforms that might endanger their profit margins. They are using scare tactics, deploying terms like "socialism" and "price controls," as if these subsidies to Big Pharma are not a form of socialism.

I have been around long enough to recognize the political games that are being played now. You see it quite regularly on the television advertisements. So let's set the record straight. The last thing Big Pharma wants is a free market. After all, these were the same folks who loved ObamaCare so much because they knew it mandated another revenue stream for their products. Now, we all know how ObamaCare has turned out. Yet they made a deal with the White House to back that bill.

Now, Big Pharma is also warning that any reforms would hurt research and development. In fact, my bipartisan legislation with Senator Wyden would result in less socialism, a more competitive marketplace, and wouldn't put a damper on innovation. That is according to something that I call "God" around here—the independent Congressional Budget Office. These are professional people making these judgments. They judge most all of our legislation, particularly if there is a monetary cost to it.

For those who may not believe a politician, let me point to the work, then,

that the professionals at CBO have done on Grassley-Wyden:

First, the updated Grassley-Wyden bill will save more than \$80 billion and result in no fewer cures.

No. 2, CBO says it will reduce patient out-of-pocket spending in Part D of Medicare by around \$50 billion.

No. 3, CBO says it will reduce premiums by about \$1 billion for tens of millions of seniors and Americans with disabilities on Medicare.

No. 4, CBO says that is all on top of out-of-pocket expenses that we put a cap on and an end to the dreaded doughnut hole that has been part of Part D since 2003.

No. 5, we have also, according to the Congressional Budget Office, created a new way to spread out payments for those out-of-pocket expenses so that paying the bills every month becomes a bit easier for those on fixed incomes.

No. 6 and lastly, according to the Congressional Budget Office, the bipartisan Prescription Drug Pricing Reduction Act—that is the title of our bill—would protect taxpayers from being put on the hook for unlimited price hikes that have no basis in a functioning free market.

So, without reforms, big pharmaceutical companies will continue to receive tens of billions of dollars in excess taxpayer subsidies, and they will also have no incentive to keep prices from rising many times faster than inflation.

Currently, prescription drug manufacturers can charge Medicare more and more every year, and they do. When the government is paying and you have entitlement programs, taxpayers are forced to foot the bill. So Grassley-Wyden enacts accountability and ends corporate welfare without harming medical innovations.

Now, Senator Wyden and I are looking forward to reintroducing our bipartisan bill very soon. So far, a dozen Senate Republicans have announced publicly that they support this bipartisan bill. Others will announce their support in the coming days, and a dozen more Republican Senators have indicated to me that Grassley-Wyden is going in the right direction, implying that they would vote for it on the Senate floor. So I am optimistic that we will continue to gain support as Senators learn more.

I was really pleased with President Trump announcing his willingness to sign a bill in his State of the Union message. The next morning, Vice President Pence was on cable TV saying that he supported Grassley-Wyden. Secretary Azar has endorsed the bill. Not only that, but Secretary Azar and a gang of people in domestic policy at the White House have been working with us on this legislation, even prior to its coming out of committee.

So, with all of this work and with all of this support—and with the interest on the part of the voters as being one of the three or four most prominent issues that will determine how people vote—it seems to me it deserves a vote on the Senate floor and very soon. So I am here today to urge my colleagues on both sides of the aisle, if they have any questions about this bill, to visit with me about it and learn how it will help all of our constituents.

The six points I made about the bill based upon what the Congressional Budget Office said about it isn't all that that bill does. There is a lot more to it.

Maybe I had better back up. I have read enough comments of my colleagues—colleagues I haven't even talked to—that said what an important issue this is. So, in one way or another, without even signing on to this bill, without even being on the Finance Committee, it seems like we have all pledged to lower prescription drug prices. So I think we should follow through on that pledge.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. KENNEDY. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

TRIBUTE TO RONNIE ANDERSON

Mr. KENNEDY. Madam President, I want to spend a few minutes talking about a friend of mine from Louisiana who is a fine American and a fine Louisianian, and he is retiring. His name is Ronnie Anderson.

I want to celebrate his 51 years of service. That number is correct. I know some of our pages here can't imagine someone being in a single job for 51 years, but Ronnie has served 51 years, and he has devoted those years, in large part, in service to our State's Farm Bureau.

He has led the Louisiana Farm Bureau to greater influence, to growing membership, and that is not a small feat, because America was born on a farm. In some respects, Louisiana was born on a farm, and farming is, as you well know, Madam President, a challenging yet very rewarding vocation and profession.

For 31 of the last 31 elections, the Louisiana Farm Bureau members have chosen Ronnie as their president. So he has won 31 elections in a row by our farmers in Louisiana, which is almost as good as the President's electoral record.

Farmers from East Carroll, in my State, to Beauregard Parishes and elsewhere in between have come to trust Ronnie as someone who knows them, who cares about them, who cares about their farms, and who was willing to rack up 71,000 miles driving his truck across the State of Louisiana in an effort to win their confidence, as Ronnie did repeatedly.

Ronnie spent most of his 71 years on this Earth working alongside the farmers whom he represents. He grew up

caring for dairy cows in East Feliciana Parish. In Louisiana, as you may know, we call our counties parishes.

Along with Ronnie's wife, Vivian, Ronnie still produces horses, hay, beef cattle, and timber. All the while he was doing this, he helped widen the arms of the Louisiana Farm Bureau and double its membership to nearly 150,000 women and men over the course of Ronnie's three decades as the organization's president.

Louisiana is a very diverse agricultural State, where each region is distinct, and Ronnie has represented every nook and every cranny of our farming and ranching community.

I am not alone in standing in awe of Ronnie Anderson's service. I am in awe, and I wish Ronnie and Vivian, in their next chapter, the chance to enjoy life. I know they have both enjoyed the 51 years of service to the Farm Bureau, but now will enjoy life in a different way.

I wanted to come here today and celebrate Ronnie's service and that of Vivian's, his life partner, as well.

I suggest the absence of a quorum.

The PRESIDING OFFICER (Mr. Young). The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. SHELBY. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

H.R. 6074

Mr. SHELBY. Mr. President, we face a serious global crisis today with the spread of the coronavirus. We all know that. The American people, I believe, expect us here in the U.S. Senate to set aside politics and set into motion a swift and sweeping response to this danger. Yesterday was a big step in that direction.

I and Vice Chairman Leahy, who is on the floor here with me, in conjunction with the leaders on both sides and with our House counterparts, introduced a comprehensive plan that provides our experts and agencies on the frontlines with the resources they tell us they need to combat this crisis.

The package we introduced includes \$7.8 billion in discretionary appropriations for the Centers for Disease Control and Prevention, the National Institutes of Health, the Food and Drug Administration, the State Department, the USAID, and the Small Business Administration. The package also authorizes an additional \$500 million in mandatory spending for telehealth through Medicare. Combined, this emergency supplemental provides \$8.3 billion in resources to attack the crisis at the local, State, Federal, and international levels.

In situations like this, I believe no expense should be spared to protect the American people, and in crafting this package, none was. It is an aggressive plan, a vigorous plan, that has received an overwhelming positive reaction in the House and in the marketplace. It is

the Senate's responsibility today to keep the momentum going.

I urge my colleagues to vote yes and demonstrate to the American people that we here in the Senate are unified and have their backs on this crisis.

The PRESIDING OFFICER. The Senator from Vermont.

Mr. LEAHY. Mr. President, I agree with what Chairman Shelby has said. We have tried to set an example. The two of us are from two different parties, from two different parts of the country and, I think it is fair to say, have two different political philosophies. Yet we have come together on this, as we have on so many other issues on appropriations, to show, as an example to our colleagues, what we think is best on this bill.

This week, Congress showed strong, decisive leadership in addressing the novel coronavirus. As appropriators of both parties often do, and as Members of Congress have proven still capable of doing even in the most partisan of times, we have put our labels aside and have come together for the American people.

I was concerned that this was something the President was not doing. We saw the President spread misinformation on national television that downplayed the potential risk to the American people. I was concerned that he was worried more about the market impacts than about human lives. His administration's initial proposal for \$1.25 billion of new spending, plus the authority to divert \$1.25 billion from such things as Ebola prevention and low-income heating assistance, was reckless and devoid of substance.

Those in the administration sought vague transfer authorities to allow them to move other money around in unidentified ways. It showed how little thought was given to what was needed and to how much was needed. I thought it was the latest attempt to undermine Congress's power of the purse—the power of the purse that Republicans and Democrats have always tried to protect.

I ask unanimous consent to have printed in the RECORD at the end of my remarks a letter from Russell T. Vought, Acting Director of the Office of Management and Budget.

I asked to submit the acting OMB Director's request letter as an example of what not do in an emerging crisis.

Fortunately, there are those who remain in our government who are very forthcoming with me and with our bipartisan staff members-my staff and Senator Shelby's staff—about the real needs of confronting the coronavirus, needs that are based on facts and science. I do thank the staffs at the Centers for Disease Control and Prevention, the National Institutes of Health, the Office of the Assistant Secretary for Preparedness and Response, and the Office of the Assistant Secretary for Financial Resources. Their help was invaluable in producing in only 9 days the package we are going

to be voting on today. During those 9 days, there was a lot of evening and weekend work by our staffs and by the Senators involved. We did it in 9 days because of the emergency, and their help was invaluable.

The crisis is real. Worldwide, there are now 92,000 confirmed cases and 3,200 confirmed deaths. Here in our country, that number is rising as there have been more than 150 confirmed cases and 11 deaths. The CDC has told us that the public health system will be able to test up to 75,000 people by the end of the week and that we should expect the number of cases here to rise. So I strongly support this \$7.8 billion package and the other money that is available.

This package is going to provide nearly \$1 billion directly to State, local, and Tribal governments to support public health preparedness and response; over \$3 billion in the research and development of vaccines, therapeutics, and diagnostics; nearly \$1 billion for healthcare preparedness, pharmaceuticals, medical supplies, and community health; \$1.25 billion to support our needed response overseas; \$7 billion in low-interest loans for small businesses; and nearly \$500 million to enhance the availability of telehealth services across the country. This is, certainly, something very important to those who might have rural areas in their States, and, frankly, we all do.

The American people are looking for leadership, and they want assurance that their government is up to the task of protecting their health and safety. I think we have to provide this leadership.

I am pleased that Congress included language in the bill—supported by both Republicans and Democrats—that specifies that the funds can only be used to prevent, prepare for, and respond to the coronavirus. If there is a cynical effort, for any reason, by the President to shift funds from the National Institutes of Health, the Centers for Disease Control and Prevention, or the Public Health Social Services Emergency Fund, which are the agencies at the epicenter of this crisis—to divert funds, for example, to activities along the southwest border—it will violate the law.

As I have said several times on this floor, I thank Chairman SHELBY and his staff, as well as the majority and Democratic leaders, for their cooperation.

I will submit a list of committee staffers who worked through weekends and late into the nights to make this possible. It is a long list, but it shows some of the most professional people we have working in the Senate. I know that Senator SHELBY has a similar list from his office.

I ask unanimous consent to have printed in the RECORD the list of the committee staffers' names.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

Charles Kieffer, Chanda Betourney, Jessica Berry, Jay Tilton, Hannah Chauvin, Shannon Hines, Jonathan Graffeo, David Adkins, Margaret Pritchard, Dianne Nellor, Morgan Ulmer, Patrick Carroll, Ellen Murray, Reeves Hart, Andrew Newton, Alex Keenan, Kelly Brown, Meghan Mott, Kathryn Toomajian, Laura Friedel, Jeff Reczek, Tim Rieser, Alex Carnes, Kali Farahmand, Paul Grove, Katherine Jackson, and Adam Yezerski

EXECUTIVE OFFICE OF THE PRESI-DENT, OFFICE OF MANAGEMENT AND BUDGET.

 $Washington,\,DC,\,February\,\,24,\,2020.$ Hon. MICHAEL R. PENCE,

President of the Senate, U.S. Senate, Washington, DC.

DEAR MR. PRESIDENT: In late December 2019. China identified a novel coronavirus which was causing human-to-human transmission and has subsequently been named COVID-19. On January 30, 2020, the World Health Organization declared a public health emergency of international concern due to widespread transmission of the virus. As of February 23, 2020, there are 78,811 confirmed cases of COVID-19 in approximately 30 countries worldwide; the total number of COVID-19 related deaths is now over 2.500 people, the majority of which are in China. In the United States, there have been 14 confirmed cases of COVID-19 presenting in seven states (not including 39 persons repatriated to the United States who have tested positive).

The President's priority is protecting the homeland, and the Administration is working aggressively to minimize the risk of the virus spreading in the United States. The President has created a Coronavirus Task Force to direct the U.S. response. This Task Force is led by the Secretary of Health and Human Services (HHS) and is composed of subject matter experts from across Government, including some of the Nation's foremost experts on infectious diseases. On January 31, 2020, the Secretary of HHS declared a public health emergency. HHS has tapped into the Centers for Disease Control and Prevention's (CDC) Infectious Diseases Rapid Response Reserve Fund to help combat the virus. In addition, fiscal year (FY) 2020 funds are being re-prioritized across HHS as necessary to address the virus.

The Government has taken unprecedented steps to minimize the risk of travelers spreading COVID-19 to the United States. The President suspended entry into the United States of certain foreign nationals who have recently traveled to China and who pose a risk of transmitting the virus and directed inbound flights from China to 11 airports where enhanced screening now takes place.

The Government has conducted numerous charter flights to evacuate American citizens from Wuhan, in the Hubei Province, China and the cruise ship *Diamond Princess* back to the United States. All passengers were screened for symptoms before the flights, and medical professionals continue to monitor the health of all returning passengers.

At the direction of the President and under the auspices of the Task Force, several Federal agencies are contributing significant resources and personnel to support the domestic and international response. To this point, no agency has been inhibited in response efforts due to resources or authorities. However, much is still unknown about this virus and the disease it causes. The Administration believes additional Federal resources are necessary to take steps to prepare for a potential worsening of the situation in the United States, and requests an appropriation of \$1.25 billion of emergency funding in the

Public Health and Social Services Emergency Fund at HHS to continue supporting critical response and preparedness activities. In addition, the Administration is requesting that the Congress permit the \$535 million in emergency supplemental funding appropriated in the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2020, to the Public Health and Social Services Emergency Fund at HHS for the prevention and treatment of Ebola to be used for COVID-19 response. Tremendous progress has been made on Ebola and the current national response priority should be COVID-19. These two proposals would make \$1.8 billion in new resources available for the current response.

This funding would support all aspects of the U.S. response, including: public health preparedness and response efforts; public health surveillance, epidemiology, laboratory testing, and quarantining costs; advanced research and development of new vaccines, therapeutics, and diagnostics; advanced manufacturing enhancements; and the Strategic National Stockpile. Funds would also be made available, as necessary, to affected States that are making contributions to the current national response.

Because this funding arises from an unforeseen, unanticipated event and is necessary for the protection of human life, these supplemental resources should be designated as emergency funding. In addition to these emergency supplemental appropriations, the Administration is seeking enhanced authorities to use existing resources most effectively and to create additional flexibility for directing resources toward the response. These flexibilities include the ability for HHS to transfer funds to CDC, the National Institutes of Health, the Food and Drug Administration, the Assistant Secretary for Preparedness and Response, and other components as necessary to carry out further response activities. This also includes enhanced transfer authority for the Secretary for the COVID-19 response, similar to the authority already provided for the HHS Refugee and Entrant Assistance account. In addition, the Administration seeks an increase of the authorized funding level, to \$10 million, for the repatriation program within the Administration for Children and Families for potential or future response activities.

With the appropriation of new emergency funding, as well as the repurposing of FY 2020 Ebola resources, reprioritization of other FY 2020 funding across HHS, and contributions from other Government agencies, across the Government we expect to allocate at least \$2.5 billion in total resources for COVID-19 response efforts.

Thank you for your consideration of these funding needs. I urge the Congress to take swift action to provide the additional funding requested to support the United States response to COVID-19. I stand ready to work with you to achieve this goal.

Sincerely.

Russell T. Vought, Acting Director.

Mr. LEAHY. Mr. President, I yield the floor

The PRESIDING OFFICER. The Senator from Maine.

Ms. COLLINS. Mr. President, I ask unanimous consent that the vote that is scheduled to begin at 1:45 p.m. begin immediately.

The PRESIDING OFFICER. Is there objection?

Without objection, it is so ordered. Ms. COLLINS. Mr. President, I ask

Ms. COLLINS. Mr. President, I a for the yeas and nays.

The PRESIDING OFFICER. Is there a sufficient second?

There appears to be a sufficient second.

The yeas and nays are ordered.

The bill was ordered to a third reading and was read the third time.

The PRESIDING OFFICER. The bill having been read the third time, the question is, Shall the bill pass?

The clerk will call the roll. The bill clerk called the roll.

Mr. THUNE. The following Senator is necessarily absent: the Senator from

Wyoming (Mr. ENZI).
Mr. DURBIN. I announce that the Senator from Vermont (Mr. SANDERS) and the Senator from Massachusetts (Ms. WARREN) are necessarily absent.

The PRESIDING OFFICER. Are there any other Senators in the Chamber desiring to vote?

The result was announced—yeas 96, nays 1, as follows:

[Rollcall Vote No. 66 Leg.]

YEAS-96

Alexander	Gardner	Perdue
Baldwin	Gillibrand	Peters
Barrasso	Graham	Portman
Bennet	Grassley	Reed
Blackburn	Harris	Risch
Blumenthal	Hassan	Roberts
Blunt	Hawley	Romney
Booker	Heinrich	Rosen
Boozman	Hirono	Rounds
Braun	Hoeven	Rubio
Brown	Hyde-Smith	Sasse
Burr	Inhofe	Schatz
Cantwell	Johnson	Schumer
Capito	Jones	Scott (FL)
Cardin	Kaine	Scott (SC)
Carper	Kennedy	Shaheen
Casey	King	Shelby
Cassidy	Klobuchar	Sinema
Collins	Lankford	Smith
Coons	Leahy	Stabenow
Cornyn	Lee	Sullivan
Cortez Masto	Loeffler	Tester
Cotton	Manchin	Thune
Cramer	Markey	Tillis
Crapo	McConnell	Toomey
Cruz	McSally	Udall
Daines	Menendez	Van Hollen
Duckworth	Merkley	Warner
Durbin	Moran	Whitehouse
Ernst	Murkowski	Wicker
Feinstein	Murphy	Wyden
Fischer	Murray	Young
	NT A 37 Ct 1	

NAYS—1 Paul

OM 110M1

NOT VOTING—3

Warren

zi Sanders

The PRESIDING OFFICER. On this vote, the yeas are 96, the nays are 1.

The 60-vote threshold, having been achieved, the bill was passed.

The bill (H.R. 6074) was passed.

ADVANCED GEOTHERMAL INNOVATION LEADERSHIP ACT OF 2019— Resumed

The PRESIDING OFFICER. The majority leader.

AMENDMENT NO. 1419 WITHDRAWN

Mr. McCONNELL. Mr. President, I withdraw amendment No. 1419.

The PRESIDING OFFICER. The Senator has that right.

The amendment is withdrawn.

The PRESIDING OFFICER. The Senator from Alaska.

AMENDMENT NO. 1407, AS MODIFIED

Ms. MURKOWSKI. Mr. President, I modify the substitute amendment No.

1407, with the changes at the desk. For the information of the Senate, this modification includes, among other things, acceptance of amendment No. 1419 offered by the Senator from Kentucky, Mr. McConnell, for the Senator from Iowa, Ms. Ernst.

The PRESIDING OFFICER. The Senator has that right.

The amendment, as modified, is as follows:

(Purpose: In the nature of a substitute)

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) Short Title.—This Act may be cited as the "American Energy Innovation Act of 2020".

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

TITLE I—INNOVATION

Subtitle A—Efficiency

PART I—ENERGY SAVINGS AND INDUSTRIAL COMPETITIVENESS

SUBPART A—BUILDINGS

CHAPTER 1—BUILDING EFFICIENCY

Sec. 1001. Commercial building energy consumption information sharing.

Sec. 1002. Energy efficiency materials pilot program.

Sec. 1003. Coordination of energy retrofitting assistance for schools.

Sec. 1004. Grants for energy efficiency improvements and renewable energy improvements at public school facilities.

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TITLE III—CODE MAINTENANCE

- Sec. 3001. Repeal of off-highway motor vehicles study.
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- Sec. 3009. Repeal of report by General Services Administration.
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- port to Congress. Sec. 3012. Repeal of procurement and identification of energy efficient
- products program. Sec. 3013. Repeal of photovoltaic energy program.
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- Sec. 3021. Repeal of submission of reports.
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- Sec. 3024. Energy Security Act repeals.
- Sec. 3025. Nuclear Safety Research, Development. and Demonstration Act of 1980 repeals.
- Sec. 3026. Repeal of Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989.
- Sec. 3027. Repeal of hydrogen research, development, and demonstration program.
- Sec. 3028. Repeal of study on alternative fuel use in nonroad vehicles and engines.
- Sec. 3029. Repeal of low interest loan program for small business fleet purchases.
- Sec. 3030. Repeal of technical and policy analysis for replacement fuel demand and supply information.
- Sec. 3031. Repeal of 1992 Report on Climate Change.
- Sec. 3032. Repeal of Director of Climate Protector establishment.

- Sec. 3033. Repeal of 1994 report on global climate change emissions.
- Sec. 3034. Repeal of telecommuting study. Sec. 3035. Repeal of advanced buildings for 2005 program.
- Sec. 3036. Repeal of Energy Research, Development, Demonstration, and Commercial Application Advisory Board.
- Sec. 3037. Repeal of study on use of energy futures for fuel purchase.
- Sec. 3038. Repeal of energy subsidy study. Sec. 3039. Elimination and consolidation of certain America COMPETES programs.
- Sec. 3040. Repeal of prior limitation on compensation of the Secretary of the Interior.

SEC. 2. DEFINITIONS.

- In this Act:
- (1) DEPARTMENT.—The term "Department" means the Department of Energy.
- (2) NATIONAL LABORATORY.—The term "National Laboratory" has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).
- (3) Secretary.—Unless otherwise specified, the term "Secretary" means the Secretary of Energy.

TITLE I—INNOVATION Subtitle A—Efficiency PART I—ENERGY SAVINGS AND INDUSTRIAL COMPETITIVENESS Subpart A—Buildings

CHAPTER 1—BUILDING EFFICIENCY SEC. 1001. COMMERCIAL BUILDING ENERGY CON-

SUMPTION INFORMATION SHARING.

- (a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Administrator of the Energy Information Administration (referred to in this section as the "Administrator") and the Administrator of the Environmental Protection Agency shall sign, and submit to Congress, an information sharing agreement (referred to in this section as the "agreement") relating to commercial building energy consumption data.
- (b) CONTENT OF AGREEMENT.—The agreement shall—
- (1) provide that the Administrator shall have access to building-specific data in the Portfolio Manager database of the Environmental Protection Agency:
- (2) describe the manner in which the Administrator shall incorporate appropriate data (including the data described in subsection (c)) into any Commercial Buildings Energy Consumption Survey (referred to in this section as "CBECS") published after the date of enactment of this Act for the purpose of analyzing and estimating building population, size, location, activity, energy usage, and any other relevant building characteristic; and
 - (3) describe and compare-
- (A) the methodologies that the Energy Information Administration, the Environmental Protection Agency, and State and local government managers use to maximize the quality, reliability, and integrity of data collected through CBECS, the Portfolio Manager database of the Environmental Protection Agency, and State and local building energy disclosure laws (including regulations), respectively, and the manner in which those methodologies can be improved; and
- (B) consistencies and variations in data for buildings that were captured in the 2012 CBECS cycle and in the Portfolio Manager database of the Environmental Protection Agency.
- (c) DATA.—The data referred in subsection (b)(2) includes data that—
- (1) is collected through the Portfolio Manager database of the Environmental Protection Agency;

- (2) is required to be publicly available on the internet under State and local government building energy disclosure laws (including regulations); and
- (3) includes information on private sector buildings that are not less than 250,000 square feet.
- (d) PROTECTION OF INFORMATION.—In carrying out the agreement, the Administrator and the Administrator of the Environmental Protection Agency shall protect information in accordance with—
- (1) section 552(b)(4) of title 5, United States Code (commonly known as the 'Freedom of Information Act'):
- (2) subchapter III of chapter 35 of title 44, United States Code: and
- (3) any other applicable law (including regulations).

SEC. 1002. ENERGY EFFICIENCY MATERIALS PILOT PROGRAM.

- (a) Definitions.—In this section:
- (1) APPLICANT.—The term "applicant" means a nonprofit organization that applies for a grant under this section.
- (2) Energy-efficiency material.—
- (A) IN GENERAL.—The term "energy-efficiency material" means a material (including a product, equipment, or system) the installation of which results in a reduction in use by a nonprofit organization of energy or fuel.
- (B) INCLUSIONS.—The term "energy-efficiency material" includes—
- (i) a roof or lighting system or component of the system:
- (ii) a window:
- (iii) a door, including a security door;
- (iv) a heating, ventilation, or air conditioning system or component of the system (including insulation and wiring and plumbing improvements needed to serve a more efficient system); and
- (v) a renewable energy generation or heating system, including a solar, photovoltaic, wind, geothermal, or biomass (including wood pellet) system or component of the system
- (3) Nonprofit building.—
- (A) IN GENERAL.—The term "nonprofit building" means a building operated and owned by an organization that is described in section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of such Code.
- (B) INCLUSIONS.—The term "nonprofit building" includes a building described in subparagraph (A) that is—
 - (i) a hospital;
- (ii) a youth center;
- (iii) a school;
- (iv) a social-welfare program facility;
- (v) a faith-based organization; or
- (vi) any other nonresidential and non-commercial structure.
- (b) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall establish a pilot program to award grants for the purpose of providing nonprofit buildings with energy-efficiency materials.
- (c) Grants.—
- (1) IN GENERAL.—The Secretary may award grants under the program established under subsection (b).
- (2) APPLICATION.—The Secretary may award a grant under paragraph (1) if an applicant submits to the Secretary an application at such time, in such form, and containing such information as the Secretary may prescribe.
- (3) CRITERIA FOR GRANT.—In determining whether to award a grant under paragraph (1), the Secretary shall apply performance-based criteria, which shall give priority to applicants based on—
 - (A) the energy savings achieved;

- (B) the cost-effectiveness of the use of energy-efficiency materials;
- (C) an effective plan for evaluation, measurement, and verification of energy savings;
 - (D) the financial need of the applicant.
- (4) LIMITATION ON INDIVIDUAL GRANT AMOUNT.—Each grant awarded under this section shall not exceed \$200,000.
- (d) REPORT.—Not later than January 1, 2023, the Secretary shall submit to Congress a report on the pilot program established under subsection (b) that describes—
- (1) the net reduction in energy use and energy costs under the pilot program; and
- (2) for each recipient of a grant under the pilot program— $\,$
- (A) the geographic location of the recipient; and
- (B) the size of the organization of the recipient.
- (e) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$10,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

SEC. 1003. COORDINATION OF ENERGY RETRO-FITTING ASSISTANCE FOR SCHOOLS.

- (a) DEFINITION OF SCHOOL.—In this section, the term "school" means—
- (1) an elementary school or secondary school (as defined in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801));
- (2) an institution of higher education (as defined in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a))):
- (3) a school of the defense dependents' education system under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921 et seq.) or established under section 2164 of title 10, United States Code;
- (4) a school operated by the Bureau of Indian Education;
- (5) a tribally controlled school (as defined in section 5212 of the Tribally Controlled Schools Act of 1988 (25 U.S.C. 2511)); and
- (6) a Tribal College or University (as defined in section 316(b) of the Higher Education Act of 1965 (20 U.S.C. 1059c(b))).
- (b) DESIGNATION OF LEAD AGENCY.—The Secretary, acting through the Office of Energy Efficiency and Renewable Energy, shall act as the lead Federal agency for coordinating and disseminating information on existing Federal programs and assistance that may be used to help initiate, develop, and finance energy efficiency, renewable energy, and energy retrofitting projects for schools.
- (c) REQUIREMENTS.—In carrying out coordination and outreach under subsection (b), the Secretary shall—
- (1) in consultation and coordination with the appropriate Federal agencies, carry out a review of existing programs and financing mechanisms (including revolving loan funds and loan guarantees) available in or from the Department of Agriculture, the Department, the Department of Education, the Department of the Treasury, the Internal Revenue Service, the Environmental Protection Agency, and other appropriate Federal agencies with jurisdiction over energy financing and facilitation that are currently used or may be used to help initiate, develop, and finance energy efficiency, renewable energy, and energy retrofitting projects for schools;
- (2) establish a Federal cross-departmental collaborative coordination, education, and outreach effort to streamline communication and promote available Federal opportunities and assistance described in paragraph (1), for energy efficiency, renewable energy, and energy retrofitting projects that enables States, local educational agencies, and schools—
- (A) to use existing Federal opportunities more effectively; and

- (B) to form partnerships with Governors, State energy programs, local educational, financial, and energy officials, State and local government officials, nonprofit organizations, and other appropriate entities, to support the initiation of the projects;
- (3) provide technical assistance for States, local educational agencies, and schools to help develop and finance energy efficiency, renewable energy, and energy retrofitting projects—
- (A) to increase the energy efficiency of buildings or facilities;
- (B) to install systems that individually generate energy from renewable energy resources:
- (C) to establish partnerships to leverage economies of scale and additional financing mechanisms available to larger clean energy initiatives: or
 - (D) to promote-
- (i) the maintenance of health, environmental quality, and safety in schools, including the ambient air quality, through energy efficiency, renewable energy, and energy retrofit projects; and
- (ii) the achievement of expected energy savings and renewable energy production through proper operations and maintenance practices;
- (4) develop and maintain a single online resource website with contact information for relevant technical assistance and support staff in the Office of Energy Efficiency and Renewable Energy for States, local educational agencies, and schools to effectively access and use Federal opportunities and assistance described in paragraph (1) to develop energy efficiency, renewable energy, and energy retrofitting projects; and
- (5) establish a process for recognition of schools that—
- (A) have successfully implemented energy efficiency, renewable energy, and energy retrofitting projects; and
- (B) are willing to serve as resources for other local educational agencies and schools to assist initiation of similar efforts.
- (d) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the implementation of this section.

SEC. 1004. GRANTS FOR ENERGY EFFICIENCY IM-PROVEMENTS AND RENEWABLE EN-ERGY IMPROVEMENTS AT PUBLIC SCHOOL FACILITIES.

- (a) Definitions.—In this section:
- (1) ELIGIBLE ENTITY.—The term "eligible entity" means a consortium of—
- (A) 1 local educational agency; and
- (B) 1 or more—
- (i) schools;
- (ii) nonprofit organizations;
- (iii) for-profit organizations; or
- (iv) community partners that have the knowledge and capacity to partner and assist with energy improvements.
- (2) ENERGY IMPROVEMENT.—The term "energy improvement" means—
- (A) any improvement, repair, renovation, or installation to a school, including school grounds, that will result in a direct reduction in school energy costs, including improvements to building envelope, air conditioning, ventilation, heating system, domestic hot water heating, compressed air systems, distribution systems, lighting, power systems, and controls;
- (B) any improvement, repair, renovation, or installation that—
- (i) leads to an improvement in teacher and student health, including indoor air quality, daylighting, ventilation, electrical lighting, green roofs, outdoor gardens, and acoustics; and
- (ii) results in a reduction in school energy costs as described in subparagraph (A);

- (C) the installation of renewable energy technologies (such as wind power, photovoltaics, solar thermal systems, geothermal energy, hydrogen-fueled systems, biomass-based systems, biofuels, anaerobic digesters, and hydropower) that provide power to a school;
- (D) the installation of zero-emissions vehicle infrastructure on school grounds for exclusive use of school buses, school fleets, or students, or for the general public; and
- (E) the purchase or lease of zero-emissions vehicles, including school buses, fleet vehicles, and other operational vehicles.
- (3) LOCAL EDUCATIONAL AGENCY.—The term "local educational agency" has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).
- (4) PARTNERING LOCAL EDUCATIONAL AGENCY.—The term "partnering local educational agency", when used with respect to an eligible entity, means the local educational agency participating in the eligible entity.
- (5) ZERO-EMISSIONS VEHICLE INFRASTRUCTURE.—The term "zero-emissions vehicle infrastructure" means infrastructure used to charge or fuel—
- (A) a zero-emission vehicle (as defined in section 88.102–94 of title 40, Code of Federal Regulations (or successor regulation)); or
- (B) a vehicle that does not produce exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.
- (b) AUTHORITY.—From amounts made available for grants under this section, the Secretary shall award competitive grants to eligible entities to make energy improvements authorized by this section.
 - (c) Applications.—
- (1) IN GENERAL.—An eligible entity desiring a grant under this section shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.
- (2) CONTENTS.—The application submitted under paragraph (1) shall include each of the following:
- (A) A needs assessment of the current condition of the school and facilities that are to receive the energy improvements.
- (B) A draft work plan of what the eligible entity proposes to achieve at the school and a description of the energy improvements to be carried out.
- (C) A description of the capacity of the eligible entity to provide services and comprehensive support to make the energy improvements.
- (D) An assessment of the applicant's expected needs of the eligible entity for operation and maintenance training funds, and a plan for use of those funds, if any.
- (E) An assessment of the expected energy, safety, and health benefits of the energy improvements.
- (F) A lifecycle cost estimate of the proposed energy improvements.
- (G) An identification of other resources that are available to carry out the activities for which funds are requested under this section, including the availability of utility programs and public benefit funds.
- (d) PRIORITY.—In awarding grants under this section, the Secretary shall give a priority to eligible entities—
- (1) that have renovation, repair, and improvement funding needs; and
- (2)(A) that serve a high percentage, as determined by the Secretary, of students who are eligible for a free or reduced price lunch under the Richard B. Russell National School Lunch Act (42 U.S.C. 1751 et seq.) (which may be calculated for students in a high school (as defined by section 8101 of the Elementary and Secondary Education Act of

- 1965 (20 U.S.C. 7801)) using data from the schools that feed into the high school); or
- (B) with a participating local educational agency designated with a school district locale code of 41, 42, or 43, as determined by the National Center for Education Statistics in consultation with the Bureau of the Census.
- (e) COMPETITIVE CRITERIA.—The competitive criteria used by the Secretary to award grants under this section shall include the following:
- (1) The difference between the fiscal capacity of the eligible entity to carry out, and the needs of the partnering local educational agency for, energy improvements at school facilities, including—
- (A) the current and historic ability of the partnering local educational agency to raise funds for construction, renovation, modernization, and major repair projects for schools;
- (B) whether the partnering local educational agency has been able to issue bonds or receive other funds to support current infrastructure needs of the partnering local educational agency; and
- (C) the bond rating of the partnering local educational agency.
- (2) The likelihood that the partnering local educational agency or eligible entity will maintain in good condition, and operate, the energy improvements at any facility the improvement of which is assisted.
- (3) The potential energy, health, and safety benefits from the proposed energy improvements, considering factors including the degree of efficiency, energy savings, and renewable energy generation in proportion to school facility size and usage.
 - (f) USE OF GRANT AMOUNTS .-
- (1) IN GENERAL.—An eligible entity receiving a grant under this section shall use the grant amounts only to make the energy improvements described in the application, subject to the other provisions of this subsection.
- (2) OPERATION AND MAINTENANCE TRAINING.—An eligible entity receiving a grant under this section may use not more than 5 percent of the grant amounts for operation and maintenance training for energy efficiency and renewable energy improvements (such as maintenance staff and teacher training, education, and preventative maintenance training).
- (3) AUDIT.—An eligible entity receiving a grant under this section may use funds under the grant for a third-party investigation and analysis for energy improvements (such as energy audits and existing building commissioning).
- (4) CONTINUING EDUCATION.—An eligible entity receiving a grant under this section may use not more than 3 percent of the grant amounts to develop a continuing education curriculum relating to energy improvements.
 - (g) CONTRACTING REQUIREMENTS.—
- (1) DAVIS-BACON.—Any laborer or mechanic employed by any contractor or subcontractor in the performance of work on any energy improvements funded by a grant under this section shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor under subchapter IV of chapter 31 of title 40, United States Code (commonly referred to as the "Davis-Bacon Act").
- (2) COMPETITION.—Each eligible entity receiving a grant under this section shall ensure that, if the eligible entity uses grant funds to carry out repair or renovation through a contract, any such contract process—
- (A) ensures the maximum number of qualified bidders, including small, minority, and

women-owned businesses, through full and open competition; and

- (B) gives priority to businesses located in, or resources common to, the State or the geographical area in which the project is carried out.
- (h) REPORTING.—Each eligible entity receiving a grant under this section shall submit to the Secretary, at such time as the Secretary may require, a report describing the use of such funds for energy improvements, the estimated cost savings realized by those energy improvements, the results of any audit, the use of any utility programs and public benefit funds, and the use of performance tracking for energy improvements.
 - (i) Best Practices.—
- (1) IN GENERAL.—The Secretary shall develop and publish guidelines and best practices for activities carried out under this section
- (2) DEVELOPMENT.—In carrying out paragraph (1), the Secretary shall—
- (A) establish minimum technical requirements for the conduct of energy audits and indoor environmental quality assessments; and
- (B) make publicly accessible on the website of the Department a brief annual report on the implementation of this section.
- (3) TECHNICAL ASSISTANCE.—The Secretary may provide technical assistance to eligible entities to implement the guidelines and best practices developed under paragraph (1).
- (j) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to carry out this section \$100,000,000 for each of fiscal years 2021 through 2025.

SEC. 1005. SMART BUILDING ACCELERATION.

- (a) DEFINITIONS.—In this section:
- (1) PROGRAM.—The term "program" means the Federal Smart Building Program established under subsection (b)(1).
- (2) SMART BUILDING.—The term "smart building" means a building, or collection of buildings, with an energy system that—
 - (A) is flexible and automated;
- (B) has extensive operational monitoring and communication connectivity, allowing remote monitoring and analysis of all building functions:
- (C) takes a systems-based approach in integrating the overall building operations for control of energy generation, consumption, and storage;
- (D) communicates with utilities and other third-party commercial entities, if appropriate;
- (E) protects the health and safety of occupants and workers; and
 - (F) is cybersecure.
- (3) SMART BUILDING ACCELERATOR.—The term "smart building accelerator" means an initiative that is designed to demonstrate specific innovative policies and approaches—
- (A) with clear goals and a clear timeline; and
- (B) that, on successful demonstration, would accelerate investment in energy efficiency.
- (b) FEDERAL SMART BUILDING PROGRAM.—
- (1) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall, in consultation with the Administrator of General Services and the Secretary of Homeland Security, as appropriate, establish a program to be known as the "Federal Smart Building Program"—
- (A) to implement smart building technology; and
- (B) to demonstrate the costs and benefits of smart buildings.
- (2) Selection.—
- (A) IN GENERAL.—The Secretary shall coordinate the selection of not fewer than 1 building from among each of several key Federal agencies, as described in paragraph

- (4), to compose an appropriately diverse set of smart buildings based on size, type, and geographic location.
- (B) INCLUSION OF COMMERCIALLY OPERATED BUILDINGS.—In making selections under subparagraph (A), the Secretary may include buildings that are owned by the Federal Government but are commercially operated.
- (C) INCLUSION OF MULTIFAMILY BUILDINGS PARTICIPATING IN FEDERAL ASSISTANCE OR LOAN GUARANTEE PROGRAMS.—In making selections under subparagraph (A), the Secretary may include—
- (i) a multifamily building in a public housing project;
- (ii) a multifamily building in a multifamily housing project receiving rental assistance under subsection (b) of section 8 of the United States Housing Act of 1937 (42 U.S.C. 1437f) that is attached to the structure pursuant to subsection (d)(2) of such section 8: and
- (iii) a multifamily building for which the mortgage secured by the building is guaranteed by the Department of Housing and Urban Development.
- (3) TARGETS.—Not later than 18 months after the date of enactment of this Act, the Secretary shall establish targets for the number of smart buildings to be commissioned and evaluated by key Federal agencies by 3 years and 6 years after the date of enactment of this Act.
- (4) FEDERAL AGENCY DESCRIBED.—The key Federal agencies referred to in paragraph (2)(A) shall include buildings operated by—
 - (A) the Department of the Army;
 - (B) the Department of the Navy;
 - (C) the Department of the Air Force;
- (D) the Department;
- (E) the Department of the Interior;
- (F) the Department of Veterans Affairs;
- (G) the General Services Administration;
- (H) the Department of Housing and Urban Development.
- (5) REQUIREMENT.—In implementing the program, the Secretary shall leverage existing financing mechanisms including energy savings performance contracts, utility energy service contracts, and annual appropriations.
- (6) EVALUATION.—Using the guidelines of the Federal Energy Management Program relating to whole-building evaluation, measurement, and verification, the Secretary shall evaluate the costs and benefits of the buildings selected under paragraph (2), including an identification of—
- (A) which advanced building technologies—
- (i) are most cost-effective; and
- (ii) show the most promise for—(I) increasing building energy savings;
- (II) increasing service performance to building occupants;
- (III) reducing environmental impacts; and
- (IV) establishing cybersecurity; and
- (B) any other information the Secretary determines to be appropriate.
- (7) AWARDS.—The Secretary may expand awards made under the Federal Energy Management Program and the Better Building Challenge to recognize specific agency achievements in accelerating the adoption of smart building technologies.
- (c) Survey of Private Sector Smart Buildings.—
- (1) SURVEY.—The Secretary shall conduct a survey of privately owned smart buildings throughout the United States, including commercial buildings, laboratory facilities, hospitals, multifamily residential buildings, and buildings owned by nonprofit organizations and institutions of higher education.
- (2) SELECTION.—From among the smart buildings surveyed under paragraph (1), the Secretary shall select not fewer than 1 build-

ing each from an appropriate range of building sizes, types, and geographic locations.

- (3) EVALUATION.—Using the guidelines of the Federal Energy Management Program relating to whole-building evaluation, measurement, and verification, the Secretary shall evaluate the costs and benefits of the buildings selected under paragraph (1), including an identification of—
- (A) which advanced building technologies and systems—
 - (i) are most cost-effective; and
 - (ii) show the most promise for-
- (I) increasing building energy savings;
- (II) increasing service performance to building occupants;
 - (III) reducing environmental impacts; and
 - (IV) establishing cybersecurity; and
- (B) any other information the Secretary determines to be appropriate.
- (d) LEVERAGING EXISTING PROGRAMS.-
- (1) BETTER BUILDING CHALLENGE.—As part of the Better Building Challenge of the Department, the Secretary, in consultation with major private sector property owners, shall develop smart building accelerators to demonstrate innovative policies and approaches that will accelerate the transition to smart buildings in the public, institutional, and commercial buildings sectors.
 - (2) Research and Development.-
- (A) IN GENERAL.—The Secretary shall conduct research and development to address key barriers to the integration of advanced building technologies and to accelerate the transition to smart buildings.
- (B) INCLUSION.—The research and development conducted under subparagraph (A) shall include research and development on—
- (i) achieving whole-building, systems-level efficiency through smart system and component integration:
- (ii) improving physical components, such as sensors and controls, to be adaptive, anticipatory, and networked;
- (iii) reducing the cost of key components to accelerate the adoption of smart building technologies:
- (iv) data management, including the capture and analysis of data and the interoperability of the energy systems;
- (v) in consultation with the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security, protecting against cybersecurity threats and addressing security vulnerabilities of building systems or equipment;
- (vi) business models, including how business models may limit the adoption of smart building technologies and how to support transactive energy;
- (vii) integration and application of combined heat and power systems and energy storage for resiliency;
- (viii) characterization of buildings and components:
- (ix) consumer and utility protections;
- (x) continuous management, including the challenges of managing multiple energy systems and optimizing systems for disparate stakeholders; and
- (xi) other areas of research and development, as determined appropriate by the Secretary.
- (e) REPORT.—Not later than 2 years after the date of enactment of this Act, and every 2 years thereafter until a total of 3 reports have been made, the Secretary shall submit to the Committees on Energy and Natural Resources, Commerce, Science, and Transportation, and Homeland Security and Governmental Affairs of the Senate and the Committees on Energy and Commerce, Science, Space, and Technology, and Homeland Security of the House of Representatives a report on—

- (1) the establishment of the Federal Smart Building Program and the evaluation of Federal smart buildings under subsection (b);
- (2) the survey and evaluation of private sector smart buildings under subsection (c); and
- (3) any recommendations of the Secretary to further accelerate the transition to smart buildings.

CHAPTER 2—WORKER TRAINING AND CAPACITY BUILDING

SEC. 1011. BUILDING TRAINING AND ASSESS-MENT CENTERS.

- (a) IN GENERAL.—The Secretary shall provide grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) and Tribal Colleges or Universities (as defined in section 316(b) of that Act (20 U.S.C. 1059c(b))) to establish building training and assessment centers—
- (1) to identify opportunities for optimizing energy efficiency and environmental performance in buildings;
- (2) to promote the application of emerging concepts and technologies in commercial and institutional buildings;
- (3) to train engineers, architects, building scientists, building energy permitting and enforcement officials, and building technicians in energy-efficient design and operation:
- (4) to assist institutions of higher education and Tribal Colleges or Universities in training building technicians;
- (5) to promote research and development for the use of alternative energy sources and distributed generation to supply heat and power for buildings, particularly energy-intensive buildings; and
- (6) to coordinate with and assist State-accredited technical training centers, community colleges, Tribal Colleges or Universities, and local offices of the National Institute of Food and Agriculture and ensure appropriate services are provided under this section to each region of the United States.
 - (b) COORDINATION AND NONDUPLICATION.—
- (1) IN GENERAL.—The Secretary shall coordinate the program with the industrial research and assessment centers program and with other Federal programs to avoid duplication of effort.
- (2) COLLOCATION.—To the maximum extent practicable, building, training, and assessment centers established under this section shall be collocated with Industrial Assessment Centers.
- (c) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$10,000,000, to remain available until expended.

SEC. 1012. CAREER SKILLS TRAINING.

- (a) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term "eligible entity" means a nonprofit partnership that—
- (1) includes the equal participation of industry, including public or private employers, and labor organizations, including joint labor-management training programs;
- (2) may include workforce investment boards, community-based organizations, qualified service and conservation corps, educational institutions, small businesses, cooperatives, State and local veterans agencies, and veterans service organizations; and
- (3) demonstrates-
- (A) experience in implementing and operating worker skills training and education programs:
- (B) the ability to identify and involve in training programs carried out under this section, target populations of individuals who would benefit from training and be actively involved in activities relating to energy efficiency and renewable energy industries; and
- (C) the ability to help individuals achieve economic self-sufficiency.

- (b) ESTABLISHMENT.—The Secretary shall award grants to eligible entities to pay the Federal share of associated career skills training programs under which students concurrently receive classroom instruction and on-the-job training for the purpose of obtaining an industry-related certification to install energy efficient buildings technologies.
- (c) FEDERAL SHARE.—The Federal share of the cost of carrying out a career skills training program described in subsection (a) shall be 50 percent.
- (d) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$10,000,000, to remain available until expended.

Subpart B—Industrial Efficiency and Competitiveness

SEC. 1021. PURPOSES.

The purposes of this subpart are-

- (1) to establish a clear and consistent authority for industrial efficiency programs of the Department;
- (2) to accelerate the deployment of technologies and practices that will increase industrial energy efficiency and improve productivity;
- (3) to accelerate the development and demonstration of technologies that will assist the deployment goals of the industrial efficiency programs of the Department and increase manufacturing efficiency;
- (4) to stimulate domestic economic growth and improve industrial productivity and competitiveness:
- (5) to meet the future workforce needs of industry; and
- (6) to strengthen partnerships between Federal and State governmental agencies and the private and academic sectors.

SEC. 1022. FUTURE OF INDUSTRY PROGRAM AND INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.

- (a) FUTURE OF INDUSTRY PROGRAM.—Section 452 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111) is amended—
- (1) by striking the section heading and inserting the following: "FUTURE OF INDUSTRY PROGRAM":
 - (2) in subsection (a)(2)—
- (A) by redesignating subparagraph (E) as subparagraph (F); and
- $\left(B\right)$ by inserting after subparagraph $\left(D\right)$ the following:
- "(E) water and wastewater treatment facilities, including systems that treat municipal, industrial, and agricultural waste; and":
- (3) by striking subsection (e); and
- (4) by redesignating subsection (f) as subsection (e).
- (b) INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—Subtitle D of title IV of the Energy Independence and Security Act of 2007 (42 U.S.C. 17111 et seq.) is amended by adding at the end the following:

"SEC. 454. INDUSTRIAL RESEARCH AND ASSESS-MENT CENTERS.

- "(a) DEFINITIONS.—In this section:
- $\lq\lq(1)$ Energy service provider.—The term 'energy service provider' means—
- "(A) any business providing technology or services to improve the energy efficiency, water efficiency, power factor, or load management of a manufacturing site or other industrial process in an energy-intensive industry (as defined in section 452(a)); and
- "(B) any utility operating under a utility energy service project.
- "(2) INDUSTRIAL RESEARCH AND ASSESSMENT CENTER.—The term 'industrial research and assessment center' means—
- "(A) an institution of higher educationbased industrial research and assessment center that is funded by the Secretary under subsection (b); and

- "(B) an industrial research and assessment center at a trade school, community college, or union training program that is funded by the Secretary under subsection (f).
- "(b) INSTITUTION OF HIGHER EDUCATION-BASED INDUSTRIAL RESEARCH AND ASSESS-MENT CENTERS.—
- "(1) IN GENERAL.—The Secretary shall provide funding to institution of higher education-based industrial research and assessment centers.
- "(2) PURPOSE.—The purpose of each institution of higher education-based industrial research and assessment center shall be—
- "(A) to identify opportunities for optimizing energy efficiency and environmental performance, including implementation of—
 - "(i) smart manufacturing;
 - "(ii) energy management systems;
 - "(iii) sustainable manufacturing; and
- "(iv) information technology advancements for supply chain analysis, logistics, system monitoring, industrial and manufacturing processes, and other purposes:
- "(B) to promote applications of emerging concepts and technologies in small- and medium-sized manufacturers (including water and wastewater treatment facilities and federally owned manufacturing facilities):
- "(C) to promote research and development for the use of alternative energy sources to supply heat, power, and new feedstocks for energy-intensive industries:
- "(D) to coordinate with appropriate Federal and State research offices:
- "(E) to provide a clearinghouse for industrial process and energy efficiency technical assistance resources; and
- "(F) to coordinate with State-accredited technical training centers and community colleges, while ensuring appropriate services to all regions of the United States.
- "(c) COORDINATION.—To increase the value and capabilities of the industrial research and assessment centers, the centers shall—
- "(1) coordinate with Manufacturing Extension Partnership Centers of the National Institute of Standards and Technology;
- "(2) coordinate with the Federal Energy Management Program and the Building Technologies Program of the Department of Energy to provide building assessment services to manufacturers:
- "(3) increase partnerships with the National Laboratories of the Department of Energy to leverage the expertise, technologies, and research and development capabilities of the National Laboratories for national industrial and manufacturing needs:
- "(4) increase partnerships with energy service providers and technology providers to leverage private sector expertise and accelerate deployment of new and existing technologies and processes for energy efficiency, power factor, and load management;
- "(5) identify opportunities for reducing greenhouse gas emissions and other air emissions; and
- "(6) promote sustainable manufacturing practices for small- and medium-sized manufacturers.
- ''(d) Outreach.—The Secretary shall provide funding for— $\,$
- "(1) outreach activities by the industrial research and assessment centers to inform small- and medium-sized manufacturers of the information, technologies, and services available; and
- "(2) coordination activities by each industrial research and assessment center to leverage efforts with—
 - "(A) Federal and State efforts;
- "(B) the efforts of utilities and energy service providers;
- "(C) the efforts of regional energy efficiency organizations; and
- "(D) the efforts of other industrial research and assessment centers.

- "(e) CENTERS OF EXCELLENCE.-
- "(1) ESTABLISHMENT.—The Secretary shall establish a Center of Excellence at not more than 5 of the highest-performing industrial research and assessment centers, as determined by the Secretary.
- "(2) DUTIES.—A Center of Excellence shall coordinate with and advise the industrial research and assessment centers located in the region of the Center of Excellence, including—
- "(A) by mentoring new directors and staff of the industrial research and assessment centers with respect to—
 - "(i) the availability of resources; and
- "(ii) best practices for carrying out assessments, including through the participation of the staff of the Center of Excellence in assessments carried out by new industrial research and assessment centers:
- "(B) by providing training to staff and students at the industrial research and assessment centers on new technologies, practices, and tools to expand the scope and impact of the assessments carried out by the centers:
- "(C) by assisting the industrial research and assessment centers with specialized technical opportunities, including by providing a clearinghouse of available expertise and tools to assist the centers and clients of the centers in assessing and implementing those opportunities;
- "(D) by identifying and coordinating with regional, State, local, and utility energy efficiency programs for the purpose of facilitating efforts by industrial research and assessment centers to connect industrial facilities receiving assessments from those centers with regional, State, local, and utility energy efficiency programs that could aid the industrial facilities in implementing any recommendations resulting from the assessments:
- "(E) by facilitating coordination between the industrial research and assessment centers and other Federal programs described in paragraphs (1) through (3) of subsection (c); and
- "(F) by coordinating the outreach activities of the industrial research and assessment centers under subsection (d)(1).
- "(3) Funding.—Subject to the availability of appropriations, for each fiscal year, out of any amounts made available to carry out this section under subsection (i), the Secretary shall use not less than \$500,000 to support each Center of Excellence.
- "(f) EXPANSION OF INDUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—
- "(1) IN GENERAL.—The Secretary shall provide funding to establish additional industrial research and assessment centers at trade schools, community colleges, and union training programs.
 - "(2) PURPOSE.—
- "(A) IN GENERAL.—Subject to subparagraph (B), to the maximum extent practicable, an industrial research and assessment center established under paragraph (1) shall have the same purpose as an institution of higher education-based industrial research center that is funded by the Secretary under subsection (b)(1).
- "(B) CONSIDERATION OF CAPABILITIES.—In evaluating or establishing the purpose of an industrial research and assessment center established under paragraph (1), the Secretary shall take into consideration the varying capabilities of trade schools, community colleges, and union training programs.
 - "(g) Workforce Training.—
- "(1) INTERNSHIPS.—The Secretary shall pay the Federal share of associated internship programs under which students work with or for industries, manufacturers, and energy service providers to implement the recommendations of industrial research and assessment centers.

- "(2) APPRENTICESHIPS.—The Secretary shall pay the Federal share of associated apprenticeship programs under which—
- "(A) students work with or for industries, manufacturers, and energy service providers to implement the recommendations of industrial research and assessment centers; and
- "(B) employees of facilities that have received an assessment from an industrial research and assessment center work with or for an industrial research and assessment center to gain knowledge on engineering practices and processes to improve productivity and energy savings.
- "(3) FEDERAL SHARE.—The Federal share of the cost of carrying out internship programs described in paragraph (1) and apprenticeship programs described in paragraph (2) shall be 50 percent.
- '(h) SMALL BUSINESS LOANS.—The Administrator of the Small Business Administration shall, to the maximum extent practicable, expedite consideration of applications from eligible small business concerns for loans under the Small Business Act (15 U.S.C. 631 et seq.) to implement recommendations developed by the industrial research and assessment centers.
- "(i) FUNDING.—There is authorized to be appropriated to the Secretary to carry out this section \$30,000,000 for each fiscal year, to remain available until expended."
- (c) CLERICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (42 U.S.C. prec. 17001) is amended by adding at the end of the items relating to subtitle D of title IV the following:
- "Sec. 454. Industrial research and assessment centers.".

SEC. 1023. CHP TECHNICAL ASSISTANCE PARTNERSHIP PROGRAM.

(a) IN GENERAL.—Section 375 of the Energy Policy and Conservation Act (42 U.S.C. 6345) is amended to read as follows:

"SEC. 375. CHP TECHNICAL ASSISTANCE PART-NERSHIP PROGRAM.

- "(a) RENAMING.—
- "(1) IN GENERAL.—The Clean Energy Application Centers of the Department of Energy are redesignated as the CHP Technical Assistance Partnership Program (referred to in this section as the 'Program').
- "(2) PROGRAM DESCRIPTION.—The Program shall consist of—
- "(A) the 10 regional CHP Technical Assistance Partnerships in existence on the date of enactment of the American Energy Innovation Act of 2020:
- "(B) any other regional CHP Technical Assistance Partnerships as the Secretary may establish; and
- "(C) any supporting technical activities under the Technical Partnership Program of the Advanced Manufacturing Office of the Department of Energy.
- "(3) REFERENCES.—Any reference in any law, rule, regulation, or publication to a Combined Heat and Power Application Center or a Clean Energy Application Center shall be deemed to be a reference to the Program
- "(b) CHP TECHNICAL ASSISTANCE PARTNER-SHIP PROGRAM.—
- "(1) IN GENERAL.—The Program shall—
- "(A) operate programs to encourage deployment of combined heat and power, waste heat to power, and efficient district energy (collectively referred to in this subsection as "CHP") technologies by providing education and outreach—
- "(i) to building, industrial, and electric and natural gas utility professionals;
- "(ii) to State and local policymakers; and "(iii) to other individuals and organizations with an interest in efficient energy use, local or opportunity fuel use, resiliency, en-

- ergy security, microgrids, and district energy; and
- (B) provide project-specific support to building and industrial professionals through economic and engineering assessments and advisory activities.
 - "(2) FUNDING FOR CERTAIN ACTIVITIES.-
- "(A) IN GENERAL.—The Program shall make funds available to institutions of higher education, research centers, and other appropriate institutions to ensure the continued operation and effectiveness of regional CHP Technical Assistance Partnerships.
- "(B) USE OF FUNDS.—Funds made available under subparagraph (A) may be used—
- "(i) to research, develop, and distribute informational materials relevant to manufacturers, commercial buildings, institutional facilities, and Federal sites;
- "(ii) to support the mission goals of the Department of Defense relating to CHP and microgrid technologies;
- "(iii) to continuously maintain and update—
 - "(I) the CHP installation database;
 - "(II) CHP technology potential analyses;
- "(III) State CHP resource websites; and
- "(IV) CHP Technical Assistance Partnerships websites;
- "(iv) to research, develop, and conduct workshops, reports, seminars, internet programs, CHP resiliency resources, and other activities to provide education to end users, regulators, and stakeholders in a manner that leads to the deployment of CHP technologies:
- "(v) to provide or coordinate onsite assessments for sites and enterprises that may consider deployment of CHP technology;
- "(vi) to identify candidates for deployment of CHP technologies, hybrid renewable-CHP technologies, microgrids, and clean energy;
- "(vii) to provide nonbiased engineering support to sites considering deployment of CHP technologies;
- "(viii) to assist organizations developing clean energy technologies and policies in overcoming barriers to deployment; and
- "(ix) to assist with field validation and performance evaluations of CHP and other clean energy technologies implemented.
- "(C) DURATION.—The Program shall make funds available under subparagraph (A) for a period of 5 years.
- "(c) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$12,000,000 for each of fiscal years 2021 through 2025.".
- (b) CONFORMING AMENDMENT.—Section 372(g) of the Energy Policy and Conservation Act (42 U.S.C. 6342(g)) is amended by striking "Clean Energy Applications Center operated by the Secretary of Energy" and inserting "regional CHP Technical Assistance Partnerships".
- (c) ČLERICAL AMENDMENT.—The table of contents of the Energy Policy and Conservation Act (Public Law 94-163; 89 Stat. 872; 92 Stat. 3272) is amended by striking the item relating to section 375 and inserting the following:
- "Sec. 375. CHP Technical Assistance Partnership Program.".

SEC. 1024. SUSTAINABLE MANUFACTURING INITIATIVE.

(a) IN GENERAL.—Part E of title III of the Energy Policy and Conservation Act (42 U.S.C. 6341 et seq.) is amended by adding at the end the following:

"SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.

"(a) IN GENERAL.—As part of the Office of Energy Efficiency and Renewable Energy of the Department of Energy, the Secretary, on the request of a manufacturer, shall carry out onsite technical assessments to identify opportunities for—

- "(1) maximizing the energy efficiency of industrial processes and cross-cutting systems:
- "(2) preventing pollution and minimizing waste:
- "(3) improving efficient use of water in manufacturing processes;
- "(4) conserving natural resources; and
- "(5) achieving such other goals as the Secretary determines to be appropriate.
- "(b) COORDINATION.—To implement any recommendations resulting from an onsite technical assessment carried out under subsection (a) and to accelerate the adoption of new and existing technologies and processes that improve energy efficiency, the Secretary shall coordinate with—
- "(1) the Advanced Manufacturing Office of the Department of Energy;
- "(2) the Building Technologies Office of the Department of Energy;
- "(3) the Federal Energy Management Program of the Department of Energy; and
- "(4) the private sector and other appropriate agencies, including the National Institute of Standards and Technology.
- "(c) RESEARCH AND DEVELOPMENT PROGRAM FOR SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECHNOLOGIES AND PROCESSES.—As part of the industrial efficiency programs of the Department of Energy, the Secretary shall carry out a joint industry-government partnership program to research, develop, and demonstrate new sustainable manufacturing and industrial technologies and processes that maximize the energy efficiency of industrial plants, reduce pollution, and conserve natural resources."
- (b) CLERICAL AMENDMENT.—The table of contents of the Energy Policy and Conservation Act (42 U.S.C. prec. 6201) is amended by adding at the end of the items relating to part E of title III the following:
- "Sec. 376. Sustainable manufacturing initiative.".

SEC. 1025. HIGH EFFICIENCY GAS TURBINES.

- (a) IN GENERAL.—The Secretary, acting through the Assistant Secretary for Fossil Energy (referred to in this section as the "Secretary"), shall carry out a multiyear, multiphase program (referred to in this section as the "program") of research, development, and technology demonstration to improve the efficiency of gas turbines used in power generation systems and aviation.
- (b) PROGRAM ELEMENTS.—The program shall—
- (1) support first-of-a-kind engineering and detailed gas turbine design for small-scale and utility-scale electric power generation, including—
- (A) high temperature materials, including superalloys, coatings, and ceramics:
 - (B) improved heat transfer capability;
- (C) manufacturing technology required to construct complex 3-dimensional geometry parts with improved aerodynamic capability;
- (D) combustion technology to produce higher firing temperature while lowering nitrogen oxide and carbon monoxide emissions per unit of output;
- (E) advanced controls and systems integration;
- (F) advanced high performance compressor technology; and
- (G) validation facilities for the testing of components and subsystems;
- (2) include technology demonstration through component testing, subscale testing, and full-scale testing in existing fleets;
- (3) include field demonstrations of the developed technology elements to demonstrate technical and economic feasibility;
- (4) assess overall combined cycle and simple cycle system performance;
- (5) increase fuel flexibility by enabling gas turbines to operate with high proportions of hydrogen or other renewable gas fuels;

- (6) enhance foundational knowledge needed for low-emission combustion systems that can work in high-pressure, high-temperature environments required for high-efficiency cycles:
- (7) increase operational flexibility by reducing turbine start-up times and improving the ability to accommodate flexible power demand: and
- (8) include any other elements necessary to achieve the goals described in subsection (c), as determined by the Secretary in consultation with private industry.
 - (c) PROGRAM GOALS.—
- (1) IN GENERAL.—The goals of the program shall be—
- (A) in phase I, to develop a conceptual design of, and to develop and demonstrate the technology required for—
- (i) advanced high efficiency gas turbines to achieve, on a lower heating value basis—
- (I) a combined cycle efficiency of not less than 65 percent; or
- (II) a simple cycle efficiency of not less than 47 percent; and
- (ii) aviation gas turbines to achieve a 25 percent reduction in fuel burn by improving fuel efficiency to existing best-in-class turbo-fan engines; and
- (B) in phase II, to develop a conceptual design of advanced high efficiency gas turbines that can achieve, on a lower heating value basis—
- (i) a combined cycle efficiency of not less than 67 percent; or
- (ii) a simple cycle efficiency of not less than 50 percent.
- (2) ADDITIONAL GOALS.—If a goal described in paragraph (1) has been achieved, the Secretary, in consultation with private industry and the National Academy of Sciences, may develop additional goals or phases for advanced gas turbine research and development.
- (d) FINANCIAL ASSISTANCE.—
- (1) IN GENERAL.—The Secretary may provide financial assistance, including grants, to carry out the program.
- (2) PROPOSALS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall solicit proposals from industry, small businesses, universities, and other appropriate parties for conducting activities under this section.
- (3) CONSIDERATIONS.—In selecting proposed projects to receive financial assistance under this section, the Secretary shall give special consideration to the extent to which the proposed project will—
- (A) stimulate the creation or increased retention of jobs in the United States; and
- (B) promote and enhance technology leadership in the United States.
- (4) COMPETITIVE AWARDS.—The Secretary shall provide financial assistance under this section on a competitive basis, with an emphasis on technical merit.
- (5) COST SHARING.—Section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352) shall apply to financial assistance provided under this section.
- (e) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2025.

SEC. 1026. CONFORMING AMENDMENTS.

- (a) Section 106 of the Energy Policy Act of 2005 (42 U.S.C. 15811) is repealed.
- (b) Sections 131, 132, 133, 2103, and 2107 of the Energy Policy Act of 1992 (42 U.S.C. 6348, 6349, 6350, 13453, 13456) are repealed.
- (c) Section 2101(a) of the Energy Policy Act of 1992 (42 U.S.C. 13451(a)) is amended in the third sentence by striking "sections 2102, 2103, 2104, 2105, 2106, 2107, and 2108" and inserting "sections 2102, 2104, 2105, 2106, and 2108 of this Act and section 376 of the Energy Policy and Conservation Act,"

Subpart C—Federal Agency Energy Efficiency

SEC. 1031. ENERGY AND WATER PERFORMANCE REQUIREMENTS FOR FEDERAL BUILDINGS.

- (a) IN GENERAL.—Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended—
- (1) in the section heading, by inserting "AND WATER" after "ENERGY";
- (2) by striking subsection (a) and inserting the following:
- "(a) ENERGY AND WATER PERFORMANCE REQUIREMENTS FOR FEDERAL BUILDINGS.—
- "(1) ENERGY REQUIREMENTS.—Subject to paragraph (3), to the maximum extent life cycle cost-effective (as defined in subsection (f)(1)), each agency shall apply energy conservation measures to, and shall improve the design for the construction of, the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2021 through 2028 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2018, by the percentage specified in the following table:

	Percentage
Fiscal Year	Reduction
2021	2.5
2022	
2023	7.5
2024	10
2025	12.5
2026	15
2027	17.5
2028	20.

- "(2) WATER REQUIREMENTS.—Subject to paragraph (3), the head of each Federal agency shall, for each of fiscal years 2021 through 2030, improve water use efficiency and management, including stormwater management, at facilities of the agency by reducing agency potable water consumption intensity—
- "(A) by reducing potable water consumption by 54 percent by fiscal year 2030, relative to the potable water consumption of the agency in fiscal year 2007, through reductions of 2 percent each fiscal year (as measured in gallons per gross square foot);
- "(B) by reducing the industrial, landscaping, and agricultural water consumption of the agency, as compared to a baseline of that consumption by the agency in fiscal year 2010, through reductions of 2 percent each fiscal year (as measured in gallons); and
- "(C) by installing appropriate infrastructure features on federally owned property to improve stormwater and wastewater management.
- "(3) ENERGY AND WATER INTENSIVE BUILDING EXCLUSION.—
- "(A) IN GENERAL.—An agency may exclude from the requirements of paragraphs (1) and (2) any building (including the associated energy consumption and gross square footage of the building) in which energy and water intensive activities are carried out.
- "(B) REPORTS.—Each agency shall identify and include in each report under section 548(a) each building designated by the agency for exclusion under subparagraph (A) during the period covered by the report.
- "(4) RECOMMENDATIONS.—Not later than December 31, 2026, the Secretary shall—
- "(A) review the results of the implementation of the energy and water performance requirements established under paragraph (1);
- "(B) submit to Congress recommendations concerning energy performance requirements for fiscal years 2029 through 2038; and
- "(C) submit to Congress recommendations concerning water performance requirements for fiscal years 2031 through 2040.";

- (3) in subsection (b)—
- (A) in the subsection heading, by inserting "AND WATER" after "ENERGY"; and
- (B) by striking paragraphs (1) and (2) and inserting the following:
- "(1) IN GENERAL.—Each agency shall—
- "(A) not later than October 1, 2022, to the maximum extent practicable, begin installing in Federal buildings owned by the United States all energy and water conservation measures determined by the Secretary to be life cycle cost-effective (as defined in subsection (f)(1)); and
- "(B) complete the installation described in subparagraph (A) as soon as practicable after the date referred to in that subparagraph.
 - "(2) Explanation of noncompliance.
- "(A) IN GENERAL.—If an agency fails to comply with paragraph (1), the agency shall submit to the Secretary, using guidelines developed by the Secretary, an explanation of the reasons for the failure.
- "(B) REPORT TO CONGRESS.—Not later than October 1, 2021, and every 2 years thereafter, the Secretary shall submit to Congress a report that describes any noncompliance by an agency with the requirements of paragraph (1).";
- (4) in subsection (c)(1)—
- (A) in subparagraph (A)-
- (i) in the matter preceding clause (i), by striking "An agency" and inserting "The head of each agency"; and
- (ii) by inserting "or water" after "energy each place it appears; and
- (B) in subparagraph (B)(i), by inserting "or water" after "energy";
- (5) in subsection (d)(2), by inserting "and water" after "energy";
 - (6) in subsection (e)-
- (A) in the subsection heading, by inserting "and Water" after "Energy";
 - (B) in paragraph (1)—
 - (i) in the first sentence-
- (I) by striking "October 1, 2012" and inserting "October 1, 2022";
- (II) by inserting "and water" after "energy"; and
- (III) by inserting "and water" after "electricity":
- (ii) in the second sentence, by inserting "and water" after "electricity"; and
- (iii) in the fourth sentence, by inserting "and water" after "energy";
 - (C) in paragraph (2)—
- (i) in subparagraph (A)—
- (I) by striking "and" before "Federal"; and (II) by inserting "and any other person the Secretary deems necessary," before "shall";
- (ii) in subparagraph (B)—
- (I) in clause (i)(II), by inserting "and water" after "energy" each place it appears; (II) in clause (ii), by inserting "and water" after "energy"; and
- (III) in clause (iv), by inserting "and water" after "energy"; and
- (iii) by adding at the end the following:
- "(C) UPDATE.—Not later than 180 days after the date of enactment of this subparagraph, the Secretary shall update the guidelines established under subparagraph (A) to take into account water efficiency requirements under this section.":
- (D) in paragraph (3), in the matter preceding subparagraph (A), by striking "established under paragraph (2)" and inserting "updated under paragraph (2)(C)"; and
 - (E) in paragraph (4)—
 - (i) in subparagraph (A)—
- (I) by striking "this paragraph" and inserting "the American Energy Innovation Act of 2020"; and
- (II) by inserting "and water" before "use in"; and
- (ii) in subparagraph (B)(ii), in the matter preceding clause (I), by inserting "and water" after "energy"; and
 - (7) in subsection (f)—

- (A) in paragraph (1)—
- (i) by redesignating subparagraphs (E), (F), and (G) as subparagraphs (F), (G), and (H), respectively; and
- (ii) by inserting after subparagraph (D) the following:
- "(E) ONGOING COMMISSIONING.—The term 'ongoing commissioning' means an ongoing process of commissioning using monitored data, the primary goal of which is to ensure continuous optimum performance of a facility, in accordance with design or operating needs, over the useful life of the facility, while meeting facility occupancy requirements.":
- (B) in paragraph (2)—
- (i) in subparagraph (A), by inserting "and water" before "use";
- (ii) in subparagraph (B)-
- (I) by striking "energy" before "efficiency"; and
- (II) by inserting "or water" before "use"; and
- (iii) by adding at the end the following:
- "(C) ENERGY MANAGEMENT SYSTEM.—An energy manager designated for a facility under subparagraph (A) shall take into consideration—
- "(i) the use of a system to manage energy and water use at the facility; and
- "(ii) the applicability of the certification of the facility in accordance with the International Organization for Standardization standard numbered 50001 and entitled 'Energy Management Systems'.";
- (C) by striking paragraphs (3) and (4) and inserting the following:
- ``(3) ENERGY AND WATER EVALUATIONS AND COMMISSIONING.—
- "(A) EVALUATIONS.—Except as provided in subparagraph (B), not later than the date that is 180 days after the date of enactment of the American Energy Innovation Act of 2020, and annually thereafter, each energy manager shall complete, for the preceding calendar year, a comprehensive energy and water evaluation and recommissioning or retrocommissioning for approximately 25 percent of the facilities of the applicable agency that meet the criteria under paragraph (2)(B) in a manner that ensures that an evaluation of each facility is completed not less frequently than once every 4 years.
- "(B) EXCEPTIONS.—An evaluation and recommissioning or retrocommissioning shall not be required under subparagraph (A) with respect to a facility that, as of the date on which the evaluation and recommissioning or retrocommissioning would occur—
- "(i) has had a comprehensive energy and water evaluation during the preceding 8-year period;
- "(ii)(I) has been commissioned, recommissioned, or retrocommissioned during the preceding 10-year period; or
- "(II) is under ongoing commissioning, recommissioning, or retrocomissioning;
- "(iii) has not had a major change in function or use since the previous evaluation and recommissioning or retrocommissioning;
- "(iv) has been benchmarked with public disclosure under paragraph (8) during the preceding calendar year; and
- "(v)(I) based on the benchmarking described in clause (iv), has achieved at a facility level the most recent cumulative energy savings target under subsection (a) compared to the earlier of—
- "(aa) the date of the most recent evaluation; or
- "(bb) the date-
- "(AA) of the most recent commissioning, recommissioning, or retrocommissioning; or
- "(BB) on which ongoing commissioning began; or
- "(II) has a long-term contract in place guaranteeing energy savings at least as

- great as the energy savings target under subclause (I).
- "(4) IMPLEMENTATION OF IDENTIFIED ENERGY AND WATER EFFICIENCY MEASURES.—
- "(A) IN GENERAL.—Not later than 2 years after the date of completion of each evaluation under paragraph (3), each energy manager shall implement any energy- or watersaving measure that—
- "(i) the Federal agency identified in the evaluation; and
- "(ii) is life cycle cost-effective, as determined by evaluating an individual measure or a bundle of measures with varying paybacks.
- "(B) PERFORMANCE CONTRACTING.—Each Federal agency shall use performance contracting to address at least 50 percent of the measures identified under subparagraph (A)(i).";
- (D) in paragraph (7)(B)(ii)(II), by inserting "and water" after "energy"; and
- (E) in paragraph (9)(A), in the matter preceding clause (i), by inserting "and water" after "energy".
- (b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 543 and inserting the following:

"Sec. 543. Energy and water management requirements.".

SEC. 1032. FEDERAL ENERGY MANAGEMENT PRO-GRAM.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

- "(h) FEDERAL ENERGY MANAGEMENT PRO-GRAM.—
- "(1) IN GENERAL.—The Secretary shall carry out a program, to be known as the 'Federal Energy Management Program' (referred to in this subsection as the 'Program'), to facilitate the implementation by the Federal Government of cost-effective energy and water management and energy-related investment practices—
- "(A) to coordinate and strengthen Federal energy and water resilience; and
- ``(B) to promote environmental stewardship.
 - "(2) PROGRAM ACTIVITIES.—
- "(A) STRATEGIC PLANNING AND TECHNICAL ASSISTANCE.—Under the Program, the Federal Director appointed under paragraph (3)(A) (referred to in this subsection as the 'Federal Director') shall—
- "(i) provide technical assistance and project implementation support and guidance to Federal agencies to identify, implement, procure, and track energy and water conservation measures required under this Act and under other provisions of law (including regulations):
- "(ii) in coordination with the Administrator of the General Services Administration, establish appropriate procedures, methods, and best practices for use by Federal agencies to select, monitor, and terminate contracts entered into under section 546 with utilities;
- "(iii) in coordination with the Federal Acquisition Regulatory Council, establish appropriate procedures, methods, and best practices for use by Federal agencies to select, monitor, and terminate contracts entered into under section 801 with energy service contractors and utilities;
- "(iv) establish and maintain internet-based information resources and project tracking systems and tools for energy and water management;
- "(v) coordinate comprehensive and strategic approaches to energy and water resilience planning for Federal agencies; and
- "(vi) establish a recognition program for Federal achievement in energy and water

management, energy-related investment practices, environmental stewardship, and other relevant areas, through events such as individual recognition award ceremonies and public announcements.

"(B) ENERGY AND WATER MANAGEMENT AND REPORTING.—Under the Program, the Federal Director shall—

"(i) track and report on the progress of Federal agencies in meeting the requirements of the agency under this section;

"(ii) make publicly available annual Federal agency performance data required under—

"(I) this section and sections 544 through 548; and

"(II) section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852);

"(iii)(I) collect energy and water use and consumption data from each Federal agency; and

"(II) based on that data, submit to each Federal agency a report that will facilitate the energy and water management, energy-related investment practices, and environmental stewardship of the agency in support of Federal goals under this Act and under other provisions of law (including regulations):

"(iv)(I) establish new Federal building energy efficiency standards; and

"(II) in consultation with the Administrator of the General Services Administration, acting through the head of the Office of High-Performance Green Buildings, establish and implement Federal building sustainable design principles for Federal facilities;

"(v) manage the implementation of Federal building energy efficiency standards established under section 305 of the Energy Conservation and Production Act (42 U.S.C. 6924), and

6834); and

"(vi) designate products that meet the highest energy conservation standards for categories not covered under the Energy Star program established under section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a).

"(C) FEDERAL POLICY COORDINATION.—Under the Program, the Federal Director shall—

"(i) develop and implement accredited training consistent with existing Federal programs and activities—

"(I) relating to energy and water use, management, and resilience in Federal buildings, energy-related investment practices, and environmental stewardship; and

"(II) that includes in-person training, internet-based programs, and national inperson training events;

"(ii) coordinate and facilitate energy and water management, energy-related investment practices, and environmental stewardship through the Interagency Energy Management Task Force established under section 547; and

"(iii) report on the implementation of the priorities of the President, including Executive orders, relating to energy and water use in Federal buildings, in coordination with—

"(I) the Office of Management and Budget;

"(II) the Council on Environmental Quality; and

"(III) any other entity, as considered necessary by the Federal Director.

"(D) FACILITY AND FLEET OPTIMIZATION.— Under the Program, the Federal Director shall develop guidance, supply assistance to, and track the progress of Federal agencies—

"(i) in conducting portfolio-wide facility energy and water resilience planning and project integration;

"(ii) in building new construction and major renovations to meet the sustainable design and energy and water performance standards required under this section;

"(iii) in developing guidelines for-

"(I) building commissioning; and

"(II) facility operations and maintenance; and

"(iv) in coordination with the Administrator of the General Services Administration, in meeting statutory and agency goals for Federal fleet vehicles.

"(3) FEDERAL DIRECTOR.—

"(A) APPOINTMENT.—The Secretary shall appoint an individual to serve as Federal Director of the Program, which shall be a career position in the Senior Executive service, to manage the Program and carry out the activities of the Program described in paragraph (2).

"(B) DUTIES.—The Federal Director shall—"(i) oversee, manage, and administer the Program:

"(ii) provide leadership in energy and water management, energy-related investment practices, and environmental stewardship through coordination with Federal agencies and other appropriate entities; and

"(iii) establish a management council to advise the Federal Director that shall—

"(I) convene not less frequently than once every quarter; and

"(II) consist of representatives from—

"(aa) the Council on Environmental Quality;

``(bb) the Office of Management and Budget; and

"(cc) the Office of Federal High-Performance Green Buildings in the General Services Administration.

"(4) SAVINGS CLAUSE.—Nothing in this subsection impedes, supersedes, or alters the authority of the Secretary to carry out the remainder of this section or section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834).

"(5) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out this subsection \$36,000,000 for each of fiscal years 2021 through 2031."

SEC. 1033. USE OF ENERGY AND WATER EFFI-CIENCY MEASURES IN FEDERAL BUILDINGS.

(a) REPORTS.—Section 548(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) is amended—

(1) in paragraph (3), by striking "and" at the end;

(2) in paragraph (4), by striking the period at the end and inserting "; and"; and

(3) by adding at the end the following:

"(5)(A) the status of the energy savings performance contracts and utility energy service contracts of each agency, to the extent that the information is not duplicative of information provided to the Secretary under a separate authority;

"(B) the quantity and investment value of the contracts for the previous year;

"(C) the guaranteed energy savings, or for contracts without a guarantee, the estimated energy savings, for the previous year, as compared to the measured energy savings for the previous year."

"(D) a forecast of the estimated quantity and investment value of contracts anticipated in the following year for each agency; and

"(E)(i) a comparison of the information described in subparagraph (B) and the forecast described in subparagraph (D) in the report of the previous year; and

"(ii) if applicable, the reasons for any differences in the data compared under clause (i).".

(b) DEFINITION OF ENERGY CONSERVATION MEASURES.—Section 551(4) of the National Energy Conservation Policy Act (42 U.S.C. 8259(4)) is amended by striking "or retrofit activities" and inserting "retrofit activities, or energy consuming devices and required support structures".

(c) AUTHORITY TO ENTER INTO CONTRACTS.— Section 801(a)(2)(F) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)(F)) is amended—

(1) in clause (i), by striking "or" at the end:

(2) in clause (ii), by striking the period at the end and inserting "; or"; and

(3) by adding at the end the following:

"(iii) limit the recognition of operation and maintenance savings associated with systems modernized or replaced with the implementation of energy conservation measures, water conservation measures, or any combination of energy conservation measures and water conservation measures."

(d) MISCELLANEOUS AUTHORITY; EXCLUDED CONTRACTS.—Section 801(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)) is amended by adding at the end the following:

"(H) MISCELLANEOUS AUTHORITY.—Notwithstanding subtitle I of title 40, United States Code, a Federal agency may accept, retain, sell, or transfer, and apply the proceeds of the sale or transfer of, any energy and water incentive, rebate, grid services revenue, or credit (including a renewable energy certificate) to fund a contract under this title.

"(I) EXCLUDED CONTRACTS.—A contract entered into under this title may not be for work performed—

"(i) at a Federal hydroelectric facility that provides power marketed by a Power Marketing Administration; or

"(ii) at a hydroelectric facility owned and operated by the Tennessee Valley Authority established under the Tennessee Valley Authority Act of 1933 (16 U.S.C. 831 et seq.).".

(e) PAYMENT OF COSTS.—Section 802 of the National Energy Conservation Policy Act (42 U.S.C. 8287a) is amended by striking "(and related operation and maintenance expenses)" and inserting ", including related operations and maintenance expenses".

(f) DEFINITION OF ENERGY SAVINGS.—Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended

(1) in subparagraph (A), by striking "federally owned building or buildings or other federally owned facilities" and inserting "Federal building (as defined in section 551)" each place it appears:

(2) in subparagraph (C), by striking "; and" and inserting a semicolon:

(3) in subparagraph (D), by striking the period at the end and inserting a semicolon; and

(4) by adding at the end the following:

"(E) the use, sale, or transfer of any energy and water incentive, rebate, grid services revenue, or credit (including a renewable energy certificate); and

"(F) any revenue generated from a reduction in energy or water use, more efficient waste recycling, or additional energy generated from more efficient equipment.".

SEC. 1034. FEDERAL BUILDING ENERGY EFFI-CIENCY PERFORMANCE STANDARDS; CERTIFICATION SYSTEM AND LEVEL FOR GREEN BUILDINGS.

(a) DEFINITIONS.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended—

(1) in each of paragraphs (1) through (16), by inserting a paragraph heading, the text of which is comprised of the term defined in that paragraph:

(2) by redesignating paragraphs (2) through (16) as paragraphs (3), (4), (6), (7), (8), (10), (12), (13), (14), (15), (16), (9), (17), (5), and (2), respectively, and moving the paragraphs so as to appear in numerical order; and

(3) by inserting after paragraph (10) (as so redesignated) the following:

- "(11) MAJOR RENOVATION.—The term 'major renovation' means a modification of the energy systems of a building that is sufficiently extensive to ensure that the entire building can achieve compliance with applicable energy standards for new buildings, as established by the Secretary.".
- (b) FEDERAL BUILDING EFFICIENCY STANDARDS.—Section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834) is amended—
 - (1) in subsection (a)—
- (A) in paragraph (2)(A), by striking "the 2004 International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1–2004 (in the case of commercial buildings)" and inserting "the most recently published edition of the International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1 (in the case of commercial buildings) on the date of enactment of the American Energy Innovation Act of 2020"; and
 - (B) in paragraph (3)—
- (i) by striking "(3)(A) Not later than" and all that follows through subparagraph (B) and inserting the following:
- "(3) REVISED FEDERAL BUILDING ENERGY EF-FICIENCY PERFORMANCE STANDARDS; CERTIFI-CATION FOR GREEN BUILDINGS.—
- "(A) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS.—
- "(i) IN GENERAL.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall establish, by regulation, revised Federal building energy efficiency performance standards that require that—
- "(I) subject to clause (ii), new Federal buildings and Federal buildings with major renovations—
- "(aa) meet or exceed the most recently published version of the International Energy Conservation Code (in the case of residential buildings) or ASHRAE Standard 90.1 (in the case of commercial buildings) as of the date of enactment of the American Energy Innovation Act of 2020; and
- G(bb) meet or exceed the energy provisions of the State and local building codes applicable to the building if the codes are more stringent than the most recently published version of the International Energy Conservation Code or ASHRAE Standard 90.1 as of the date of enactment of the American Energy Innovation Act of 2020, as applicable;
- "(II) unless demonstrated not to be life cycle cost-effective for new Federal buildings and Federal buildings with major renovations—
- "(aa) the buildings shall be designed to achieve energy consumption levels that are not less than 30 percent below the levels established in the most recently published version of the International Energy Conservation Code or the ASHRAE Standard, as of the date of enactment of the American Energy Innovation Act of 2020, as appropriate, unless the Secretary determines, pursuant to subparagraph (B), that a subsequent version of such a standard or code shall apply; and
- "(bb) sustainable design principles are applied to the location, siting, design, and construction of all new Federal buildings and replacement Federal buildings;
- "(III) if water is used to achieve energy efficiency, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost effective; and
- "(IV) if life-cycle cost effective, as compared to other reasonably available technologies, not less than 30 percent of the hot water demand for each new Federal building or Federal building undergoing a major renovation be met through the installation and use of solar hot water heaters.

- "(ii) EXCEPTION.—Clause (i)(I) shall not apply to the unaltered portions of Federal buildings and systems that have undergone major renovations.
- "(B) UPDATES.—Not later than 1 year after the date of approval of each subsequent revision of the ASHRAE Standard or the International Energy Conservation Code, as appropriate, the Secretary shall determine whether the revised standards established under subclauses (I) and (II) of subparagraph (A)(i) should be updated to reflect the revisions, based on the energy savings and life cycle cost-effectiveness of the revisions.";
- (ii) in subparagraph (C)-
- (I) by striking "(C) In the budget request" and inserting the following:
- "(C) BUDGET REQUEST.—In the budget request": and
- (II) by indenting clauses (i) and (ii) appropriately; and
- (iii) by striking subparagraph (D) and inserting the following:
- "(D) CERTIFICATION FOR GREEN BUILDINGS.—
- "(i) SUSTAINABLE DESIGN PRINCIPLES.—Sustainable design principles shall be applied to the siting, design, and construction of buildings covered by this subparagraph.
- '(ii) Selection of Certification sys-TEMS.—The Secretary, after reviewing the findings of the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)), in consultation with the Administrator of General Services, and in consultation with the Secretary of Defense relating to those facilities under the custody and control of the Department of Defense, shall determine those certification systems for green commercial and residential buildings that the Secretary determines to be the most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings.
- "(iii) BASIS FOR SELECTION.—The determination of the certification systems under clause (ii) shall be based on ongoing review of the findings of the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)) and the criteria described in clause (v).
- "(iv) ADMINISTRATION.—In determining certification systems under this subparagraph, the Secretary shall—
- "(I) make a separate determination for all or part of each system; and
- (II) confirm that the criteria used to support the selection of building products, materials, brands, and technologies—
- "(aa) are based on relevant technical data; "(bb) use and reward evaluation of health, safety, and environmental risks and impacts across the lifecycle of the building product, material, brand, or technology, including methodologies generally accepted by the applicable scientific disciplines:
- "(cc) as practicable, give preference to performance standards instead of prescriptive measures: and
- "(dd) reward continual improvements in the lifecycle management of health, safety, and environmental risks and impacts.
- "(v) Considerations.—In determining the green building certification systems under this subparagraph, the Secretary shall take into consideration—
- "(I) the ability and availability of assessors and auditors to independently verify the criteria and measurement of metrics at the scale necessary to implement this subparagraph;
- "(II) the ability of the applicable certification organization to collect and reflect public comment;
- "(III) the ability of the standard to be developed and revised through a consensusbased process;

- "(IV) an evaluation of the robustness of the criteria for a high-performance green building, which shall give credit for promoting—
- "(aa) efficient and sustainable use of water, energy, and other natural resources;
- "(bb) use of renewable energy sources;
- "(cc) improved indoor environmental quality through enhanced indoor air quality, thermal comfort, acoustics, day lighting, pollutant source control, and use of low-emission materials and building system controls:
- "(dd)(AA) the sourcing of grown, harvested, or mined materials; and
- "(BB) certifications of responsible sourcing, such as certifications provided by the Forest Stewardship Council, the Sustainable Forestry Initiative, the American Tree Farm System, or the Programme for the Endorsement of Forest Certification; and
- "(ee) such other criteria as the Secretary determines to be appropriate; and
- "(V) national recognition within the building industry.
- "(vi) REVIEW.—The Secretary, in consultation with the Administrator of General Services and the Secretary of Defense, shall conduct an ongoing review to evaluate and compare private sector green building certification systems, taking into account—
- "(I) the criteria described in clause (v); and "(II) the identification made by the Federal Director under section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)).
 - "(vii) EXCLUSIONS.—
- "(I) IN GENERAL.—Subject to subclause (II), if a certification system fails to meet the review requirements of clause (v), the Secretary shall—
- "(aa) identify the portions of the system, whether prerequisites, credits, points, or otherwise, that meet the review criteria of clause (v):
- "(bb) determine the portions of the system that are suitable for use; and
- "(cc) exclude all other portions of the system from identification and use.
- "(II) ENTIRE SYSTEMS.—The Secretary shall exclude an entire system from use if an exclusion under subclause (I)—
- "(aa) impedes the integrated use of the system:
- "(bb) creates disparate review criteria or unequal point access for competing materials; or
 - "(cc) increases agency costs of the use.
- "(viii) INTERNAL CERTIFICATION PROCESSES.—The Secretary may by rule allow Federal agencies to develop internal certification processes, using certified professionals, in lieu of certification by certification entities identified under clause (ii).
- "(ix) PRIVATIZED MILITARY HOUSING.—With respect to privatized military housing, the Secretary of Defense, after consultation with the Secretary may, through rulemaking, develop alternative certification systems and levels than the systems and levels identified under clause (ii) that achieve an equivalent result in terms of energy savings, sustainable design, and green building performance.
- "(x) WATER CONSERVATION TECHNOLOGIES.— In addition to any use of water conservation technologies otherwise required by this section, water conservation technologies shall be applied to the extent that the technologies are life-cycle cost-effective.
 - "(xi) Effective date.-
- "(I) DETERMINATIONS MADE AFTER DECEMBER 31, 2020.—This subparagraph shall apply to any determination made by a Federal agency after December 31, 2020.
- "(II) DETERMINATIONS MADE ON OR BEFORE DECEMBER 31, 2020.—This subparagraph (as in effect on the day before the date of enactment of the American Energy Innovation

Act of 2020) shall apply to any use of a certification system for green commercial and residential buildings by a Federal agency on or before December 31, 2020."; and

- (2) by striking subsections (c) and (d) and inserting the following:
- "(c) PERIODIC REVIEW.—The Secretary shall—
- "(1) once every 5 years, review the Federal building energy standards established under this section; and
- "(2) on completion of a review under paragraph (1), if the Secretary determines that significant energy savings would result, upgrade the standards to include all new energy efficiency and renewable energy measures that are technologically feasible and economically justified."
- (c) Federal Compliance.—Section 306 of the Energy Conservation and Production Act (42 U.S.C. 6835) is amended—
 - (1) in subsection (a)—
 - (A) in paragraph (1)—
- (i) by striking "(1) The head" and inserting the following:
- "(1) IN GENERAL.—The head"; and
- (ii) by striking "assure that new Federal buildings" and inserting "ensure that new Federal buildings and Federal buildings with major renovations"; and
 - (B) in paragraph (2)—
- (i) by striking the second sentence and inserting the following:
- "(B) PROCEDURES.—The Architect of the Capitol shall adopt procedures necessary to ensure that the buildings referred to in subparagraph (A) meet or exceed the standards described in that subparagraph."; and
 - (ii) in the first sentence-
- (I) by inserting "and Federal buildings with major renovations" after "new buildings"; and
- (II) by striking "(2) The Federal" and inserting the following:
 - "(2) APPLICABILITY.—
 - "(A) IN GENERAL.—The Federal"; and
- (2) in subsection (b)—
- (A) by striking the subsection heading and inserting "EXPENDITURES"; and
- (B) by striking "new Federal building" and all that follows through the period at the end and inserting "new Federal building or a Federal building with major renovations.".

SEC. 1035. ENERGY-EFFICIENT AND ENERGY-SAV-ING INFORMATION TECHNOLOGIES.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) (as amended by section 1032) is amended by adding at the end the following:

- "(i) FEDERAL IMPLEMENTATION STRATEGY FOR ENERGY-EFFICIENT AND ENERGY-SAVING INFORMATION TECHNOLOGIES.—
 - "(1) DEFINITIONS.—In this subsection:
- "(A) DIRECTOR.—The term 'Director' means the Director of the Office of Management and Budget.
- "(B) INFORMATION TECHNOLOGY.—The term information technology has the meaning given that term in section 11101 of title 40, United States Code.
- "(2) Development OF IMPLEMENTATION STRATEGY.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, each Federal agency shall coordinate with the Director, the Secretary, and the Administrator of the Environmental Protection Agency to develop an implementation strategy (including bestpractices and measurement and verification techniques) for the maintenance, purchase, and use by the Federal agency of energy-efficient and energy-saving information technologies at or for facilities owned and operated by the Federal agency, taking into consideration the performance goals established under paragraph (4).

- "(3) ADMINISTRATION.—In developing an implementation strategy under paragraph (2), each Federal agency shall consider—
 - "(A) advanced metering infrastructure;
- "(B) energy efficient data center strategies and methods of increasing asset and infrastructure utilization;
 - "(C) advanced power management tools;
- "(D) building information modeling, including building energy management;
- "(E) secure telework and travel substitution tools; and
- "(F) mechanisms to ensure that the agency realizes the energy cost savings of increased efficiency and utilization.
 - "(4) PERFORMANCE GOALS.—
- "(A) In general.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, the Director, in consultation with the Secretary, shall establish performance goals for evaluating the efforts of Federal agencies in improving the maintenance, purchase, and use of energy-efficient and energy-saving information technology at or for facilities owned and operated by the Federal agencies.
- "(B) BEST PRACTICES.—The Chief Information Officers Council established under section 3603 of title 44, United States Code, shall recommend best practices for the attainment of the performance goals established under subparagraph (A), which shall include, to the extent applicable by law, consideration by a Federal agency of the use of—
- "(i) energy savings performance contracting; and
 - "(ii) utility energy services contracting.
- "(5) Reports.-
- "(A) AGENCY REPORTS.—Each Federal agency shall include in the report of the agency under section 527 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17143) a description of the efforts and results of the agency under this subsection.
- "(B) OMB GOVERNMENT EFFICIENCY REPORTS AND SCORECARDS.—Effective beginning not later than October 1, 2022, the Director shall include in the annual report and scorecard of the Director required under section 528 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17144) a description of the efforts and results of Federal agencies under this subsection.
- "(C) USE OF EXISTING REPORTING STRUCTURES.—The Director may require Federal agencies to submit any information required to be submitted under this subsection though reporting structures in use as of the date of enactment of the American Energy Innovation Act of 2020."

SEC. 1036. HIGH-PERFORMANCE GREEN FEDERAL BUILDINGS.

Section 436(h) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17092(h)) is amended—

- (1) in the subsection heading, by striking "System" and inserting "Systems";
- (2) by striking paragraph (1) and inserting the following:
- "(1) IN GENERAL.—Based on an ongoing review, the Federal Director shall identify and shall provide to the Secretary pursuant to section 305(a)(3)(D) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(D)) a list of those certification systems that the Director identifies as the most likely to encourage a comprehensive and environmentally sound approach to certification of green buildings."; and
- (3) in paragraph (2)—
- (A) in the matter preceding subparagraph (A), by striking "system" and inserting "systems":
- (B) by striking subparagraph (A) and inserting the following:
- "(A) an ongoing review provided to the Secretary pursuant to section 305(a)(3)(D) of

- the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3)(D)), which shall—
- "(i) be carried out by the Federal Director to compare and evaluate standards; and
- "(ii) allow any developer or administrator of a rating system or certification system to be included in the review;";
- (C) in subparagraph (E)(v), by striking "and" after the semicolon at the end;
- (D) in subparagraph (F), by striking the period at the end and inserting a semicolon; and
 - (E) by adding at the end the following:
- "(G) a finding that, for all credits addressing the sourcing of grown, harvested, or mined materials, the system rewards the use of products that have obtained certifications of responsible sourcing, such as certifications provided by the Sustainable Forestry Initiative, the Forest Stewardship Council, the American Tree Farm System, or the Programme for the Endorsement of Forest Certification: and
- "(H) a finding that the system incorporates life-cycle assessment as a credit pathway.".

SEC. 1037. ENERGY EFFICIENT DATA CENTERS.

Section 453 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17112) is amended—

- (1) in subsection (b)-
- (A) in paragraph (2)(D)(iv), by striking "determined by the organization" and inserting "proposed by the stakeholders"; and
 - (B) by striking paragraph (3); and
- (2) by striking subsections (c) through (g) and inserting the following:
 - "(c) STAKEHOLDER INVOLVEMENT.—
- "(1) IN GENERAL.—The Secretary and the Administrator shall carry out subsection (b) in collaboration with the information technology industry and other key stakeholders, with the goal of producing results that accurately reflect the most relevant and useful information.
- "(2) Considerations.—In carrying out the collaboration described in paragraph (1), the Secretary and the Administrator shall pay particular attention to organizations that—
- "(A) have members with expertise in energy efficiency and in the development, operation, and functionality of data centers, information technology equipment, and software, including representatives of hardware manufacturers, data center operators, and facility managers;
- "(B) obtain and address input from the National Laboratories (as that term is defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) or any institution of higher education, research institution, industry association, company, or public interest group with applicable expertise;
 - "(C) follow-
- "(i) commonly accepted procedures for the development of specifications; and
- "(ii) accredited standards development processes; or
- "(D) have a mission to promote energy efficiency for data centers and information technology.
- "(d) MEASUREMENTS AND SPECIFICATIONS.— The Secretary and the Administrator shall consider and assess the adequacy of the specifications, measurements, best practices, and benchmarks described in subsection (b) for use by the Federal Energy Management Program, the Energy Star Program, and other efficiency programs of the Department of Energy or the Environmental Protection Agency.
 - "(e) STUDY.—
- "(1) DEFINITION OF REPORT.—In this subsection, the term 'report' means the report of the Lawrence Berkeley National Laboratory entitled 'United States Data Center Energy Usage Report' and dated June 2016,

which was prepared as an update to the 'Report to Congress on Server and Data Center Energy Efficiency', published on August 2, 2007, pursuant to section 1 of Public Law 109-431 (120 Stat. 2920).

"(2) STUDY.—Not later than 4 years after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in collaboration with the Administrator, shall make available to the public an update to the report that provides—

"(A) a comparison and gap analysis of the estimates and projections contained in the report with new data regarding the period from 2015 through 2019:

"(B) an analysis considering the impact of information technologies, including virtualization and cloud computing, in the public and private sectors:

"(C) an evaluation of the impact of the combination of cloud platforms, mobile devices, social media, and big data on data center energy usage:

"(D) an evaluation of water usage in data centers and recommendations for reductions in that water usage; and

"(E) updated projections and recommendations for best practices through fiscal year 2025.

"(f) DATA CENTER ENERGY PRACTITIONER PROGRAM.—

"(1) IN GENERAL.—The Secretary, in collaboration with key stakeholders and the Director of the Office of Management and Budget, shall maintain a data center energy practitioner program that provides for the certification of energy practitioners qualified to evaluate the energy usage and efficiency opportunities in federally owned and operated data centers.

"(2) EVALUATIONS.—Each Federal agency shall consider having the data centers of the agency evaluated once every 4 years by energy practitioners certified pursuant to the program, whenever practicable using certified practitioners employed by the agency.

"(g) OPEN DATA INITIATIVE.—

- "(1) IN GENERAL.—The Secretary, in collaboration with key stakeholders and the Director of the Office of Management and Budget, shall establish an open data initiative relating to energy usage at federally owned and operated data centers, with the purpose of making the data available and accessible in a manner that encourages further data center innovation, optimization, and consolidation.
- "(2) CONSIDERATION.—In establishing the initiative under paragraph (1), the Secretary shall consider using the online Data Center Maturity Model
- "(h) INTERNATIONAL SPECIFICATIONS AND METRICS.—The Secretary, in collaboration with key stakeholders, shall actively participate in efforts to harmonize global specifications and metrics for data center energy and water efficiency.

"(i) DATA CENTER UTILIZATION METRIC.— The Secretary, in collaboration with key stakeholders, shall facilitate in the development of an efficiency metric that measures the energy efficiency of a data center (including equipment and facilities).

"(j) PROTECTION OF PROPRIETARY INFORMA-TION.—The Secretary and the Administrator shall not disclose any proprietary information or trade secrets provided by any individual or company for the purposes of carrying out this section or the programs and initiatives established under this section."

Subpart D—Rebates and Certifications SEC. 1041. THIRD-PARTY CERTIFICATION UNDER ENERGY STAR PROGRAM.

Section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a) is amended by adding at the end the following:

"(e) THIRD-PARTY CERTIFICATION.—

- "(1) IN GENERAL.—Subject to paragraph (2), not later than 180 days after the date of enactment of this subsection, the Administrator shall revise the certification requirements for the labeling of consumer, home, and office electronic products for program partners that have complied with all requirements of the Energy Star program for a period of at least 18 months.
- "(2) ADMINISTRATION.—In the case of a program partner described in paragraph (1), the new requirements under paragraph (1)—

"(A) shall not require third-party certification for a product to be listed; but

"(B) may require that test data and other product information be submitted to facilitate product listing and performance verification for a sample of products.

"(3) THIRD PARTIES.—Nothing in this subsection prevents the Administrator from using third parties in the course of the administration of the Energy Star program.

"(4) TERMINATION.—

"(A) IN GENERAL.—Subject to subparagraph (B), an exemption from third-party certification provided to a program partner under paragraph (1) shall terminate if the program partner is found to have violated program requirements with respect to at least 2 separate models during a 2-year period.

"(B) RESUMPTION.—A termination for a program partner under subparagraph (A) shall cease if the program partner complies with all Energy Star program requirements for a period of at least 3 years.".

SEC. 1042. EXTENDED PRODUCT SYSTEM REBATE PROGRAM.

- (a) DEFINITIONS.—In this section:
- (1) ELECTRIC MOTOR.—The term "electric motor" has the meaning given the term in section 431.12 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act).
- (2) ELECTRONIC CONTROL.—The term "electronic control" means—
 - (A) a power converter; or
- (B) a combination of a power circuit and control circuit included on 1 chassis.
- (3) EXTENDED PRODUCT SYSTEM.—The term "extended product system" means an electric motor and any required associated electronic control and driven load that—
- (A) offers variable speed or multispeed operation;
- (B) offers partial load control that reduces input energy requirements (as measured in kilowatt-hours) as compared to identified base levels set by the Secretary; and
- (C)(i) has greater than 1 horsepower; and (ii) uses an extended product system technology, as determined by the Secretary.
- (4) QUALIFIED EXTENDED PRODUCT SYSTEM.-
- (A) IN GENERAL.—The term "qualified extended product system" means an extended product system that—
- (i) includes an electric motor and an electronic control; and
- (ii) reduces the input energy (as measured in kilowatt-hours) required to operate the extended product system by not less than 5 percent, as compared to identified base levels set by the Secretary.
- (B) INCLUSIONS.—The term "qualified extended product system" includes commercial or industrial machinery or equipment that—
- (i)(I) did not previously make use of the extended product system prior to the redesign described in subclause (II); and
- (II) incorporates an extended product system that has greater than 1 horsepower into redesigned machinery or equipment; and
- (ii) was previously used prior to, and was placed back into service during, calendar year 2021 or 2022.
- (b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program to provide rebates for expenditures made by

qualified entities for the purchase or installation of a qualified extended product system.

- (c) Qualified Entities.—
- (1) ELIGIBILITY REQUIREMENTS.—A qualified entity under this section shall be—
- (A) in the case of a qualified extended product system described in subsection (a)(4)(A), the purchaser of the qualified extended product that is installed; and
- (B) in the case of a qualified extended product system described in subsection (a)(4)(B), the manufacturer of the commercial or industrial machinery or equipment that incorporated the extended product system into that machinery or equipment.
- (2) APPLICATION.—To be eligible to receive a rebate under this section, a qualified entity shall submit to the Secretary—
- (A) an application in such form, at such time, and containing such information as the Secretary may require; and
- (B) a certification that includes demonstrated evidence—
- (i) that the entity is a qualified entity; and (ii)(I) in the case of a qualified entity described in paragraph (1)(A)—
- (aa) that the qualified entity installed the qualified extended product system during the 2 fiscal years following the date of enactment of this Act:
- (bb) that the qualified extended product system meets the requirements of subsection (a)(4)(A); and
- (cc) showing the serial number, manufacturer, and model number from the nameplate of the installed motor of the qualified entity on which the qualified extended product system was installed; or
- (II) in the case of a qualified entity described in paragraph (1)(B), demonstrated evidence—
- (aa) that the qualified extended product system meets the requirements of subsection (a)(4)(B); and
- (bb) showing the serial number, manufacturer, and model number from the nameplate of the installed motor of the qualified entity with which the extended product system is integrated.
 - (d) AUTHORIZED AMOUNT OF REBATE.-
- (1) In general.—The Secretary may provide to a qualified entity a rebate in an amount equal to the product obtained by multiplying—
- (A) an amount equal to the sum of the nameplate rated horsepower of—
- (i) the electric motor to which the qualified extended product system is attached; and
 - (ii) the electronic control; and
 - (B) \$25.
- (2) MAXIMUM AGGREGATE AMOUNT.—A qualified entity shall not be entitled to aggregate rebates under this section in excess of \$25,000 per calendar year.
- (e) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$5,000,000 for each of the first 2 full fiscal years following the date of enactment of this Act, to remain available until expended.

SEC. 1043. ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM.

- (a) Definitions.—In this section:
- (1) QUALIFIED ENERGY EFFICIENT TRANSFORMER.—The term "qualified energy efficient transformer" means a transformer that meets or exceeds the applicable energy conservation standards described in the tables in subsection (b)(2) and paragraphs (1) and (2) of subsection (c) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act).
- (2) QUALIFIED ENERGY INEFFICIENT TRANS-FORMER.—The term "qualified energy inefficient transformer" means a transformer with an equal number of phases and capacity

to a transformer described in any of the tables in subsection (b)(2) and paragraphs (1) and (2) of subsection (c) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act)

(A) does not meet or exceed the applicable energy conservation standards described in paragraph (1); and

(B)(i) was manufactured between January 1, 1987, and December 31, 2008, for a transformer with an equal number of phases and capacity as a transformer described in the table in subsection (b)(2) of section 431.196 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this Act); or

(ii) was manufactured between January 1, 1992, and December 31, 2011, for a transformer with an equal number of phases and capacity as a transformer described in the table in paragraph (1) or (2) of subsection (c) of that section (as in effect on the date of enactment of this Act).

(3) QUALIFIED ENTITY.—The term "qualified entity" means an owner of industrial or manufacturing facilities, commercial buildings, or multifamily residential buildings, a utility, or an energy service company that fulfills the requirements of subsection (d).

(b) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a program to provide rebates to qualified entities for expenditures made by the qualified entity for the replacement of a qualified energy inefficient transformer with a qualified energy efficient transformer.

(c) REQUIREMENTS.—To be eligible to receive a rebate under this section, an entity shall submit to the Secretary an application in such form, at such time, and containing such information as the Secretary may require, including demonstrated evidence-

(1) that the entity purchased a qualified energy efficient transformer;

(2) of the core loss value of the qualified energy efficient transformer;

(3) of the age of the qualified energy inefficient transformer being replaced;

(4) of the core loss value of the qualified energy inefficient transformer being re-

(A) as measured by a qualified professional or verified by the equipment manufacturer, as applicable: or

(B) for transformers described in subsection (a)(2)(B)(i), as selected from a table of default values as determined by the Secretary in consultation with applicable industry; and

(5) that the qualified energy inefficient transformer has been permanently decommissioned and scrapped.

(d) AUTHORIZED AMOUNT OF REBATE.—The amount of a rebate provided under this section shall be-

(1) for a 3-phase or single-phase transformer with a capacity of not less than 10 and not greater than 2,500 kilovolt-amperes, twice the amount equal to the difference in Watts between the core loss value (as measured in accordance with paragraphs (2) and (4) of subsection (c)) of-

(A) the qualified energy inefficient transformer: and

(B) the qualified energy efficient transformer: or

(2) for a transformer described in subsection (a)(2)(B)(i), the amount determined using a table of default rebate values by rated transformer output, as measured in kilovolt-amperes, as determined by the Secretary in consultation with applicable indus-

(e) AUTHORIZATION OF APPROPRIATIONS.-There is authorized to be appropriated to carry out this section \$5,000,000 for each of

fiscal years 2021 and 2022, to remain available until expended.
(f) TERMINATION OF EFFECTIVENESS.—The

authority provided by this section terminates on December 31, 2022.

Subpart E-Miscellaneous

SEC. 1051. STATE ENERGY CONSERVATION PLANS.

Section 362(d) of the Energy Policy and Conservation Act (42 U.S.C. 6322(d)) is amended by striking paragraph (3) and inserting the following:

"(3) programs to increase transportation energy efficiency, including programs to help reduce carbon emissions in the transportation sector and accelerate the use of alternative transportation fuels for and electrification of State government vehicles, fleet vehicles, taxis and ridesharing services, mass transit, school buses, and privately owned passenger and medium- and heavyduty vehicles;"

SEC. 1052. REPORT ON ELECTROCHROMIC GLASS.

DEFINITION OF ELECTROCHROMIC (a) $GLASS.{--}In$ section. this the term 'electrochromic glass' means glass that uses electricity to change the light transmittance properties of the glass to heat or cool a structure.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary, in collaboration with the heads of other relevant agencies, shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that addresses the benefits of electrochromic glass, including the following:

(1) Reductions in energy consumption in commercial buildings, especially peak cooling load reduction and annual energy bill savings

(2) Benefits in the workplace, especially visual comfort and employee health.

(3) Benefits of natural light in hospitals for patients and staff, especially accelerated patient healing and recovery time.

SEC. 1053. ADVANCE APPROPRIATIONS RE-QUIRED.

The authorization of amounts under this part and the amendments made by this part shall be effective for any fiscal year only to the extent and in the amount provided in advance in appropriations Acts.

PART II—WEATHERIZATION

SEC. 1101. WEATHERIZATION ASSISTANCE PRO-GRAM.

(a) DEFINITION OF WEATHERIZATION MATE-RIALS.—Section 412(9)(J) of the Energy Conservation and Production Act (42 U.S.C. 6862(9)(J)) is amended-

(1) by inserting ", including renewable energy technologies and other advanced technologies," after "technologies"; and

(2) by striking "Development," and all that follows through the period at the end and inserting "Development and the Secretary of Agriculture."

(b) ALLOWANCE FOR HEALTH AND SAFETY BENEFITS.—Section 413(b) of the Energy Conservation and Production Act (42 U.S.C. 6863(b)) is amended-

(1) in paragraph (2)(B), by striking "paragraph (5)" and inserting "paragraph (6)";

(2) in paragraph (3)—

(A) in the first sentence, by striking "and with the Director of the Community Services Administration"; and

(B) in the first sentence of the undesignated matter following subparagraph (C)-

(i) by striking "part," and inserting "part and by": and

(ii) by striking ", and the Director" and all that follows through "1964";

(3) by redesignating paragraphs (5) and (6) as paragraphs (6) and (7), respectively; and

(4) by inserting after paragraph (4) the following:

"(5) In carrying out paragraph (3), the Secretary may take into consideration evidence-based values for improvements in the health and safety of occupants of weatherized homes, and other non-energy benefits, as determined by the Secretary.".

(c) CONTRACTOR OPTIMIZATION.-

(1) TECHNICAL TRANSFER GRANTS.—Section 414B(a)(4) of the Energy Conservation and Production Act (42 U.S.C. 6864b(a)(4)) is amended-

(A) by striking "for persons" and inserting the following: "for—"(A) persons"; and

(B) in subparagraph (A) (as so designated), by striking the period at the end and inserting the following: "; and

"(B) private entities that are contracted to provide weatherization assistance under this part, in accordance with rules determined by the Secretary."

(2) CONTRACTOR OPTIMIZATION.—The Energy Conservation and Production Act is amended by inserting after section 414B (42 U.S.C. 6864b) the following:

"SEC. 414C. CONTRACTOR OPTIMIZATION.

"The Secretary may request that entities receiving funding from the Federal Government or from a State through a weatherization assistance program under section 413 or 414-

"(1) perform periodic reviews of the use of private contractors in the provision of weatherization assistance, if applicable; and

'(2) encourage an increased use and expanded role of contractors as appropriate.

(3) TABLE OF CONTENTS AMENDMENT.—The table of contents for the Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1125) is amended by inserting after the item relating to section 414B the following:

"Sec. 414C. Contractor optimization."

(d) FINANCIAL ASSISTANCE FOR WAP EN-HANCEMENT AND INNOVATION.

(1) IN GENERAL.—The Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1125) is amended by inserting after section 414C (as added by subsection (c)(2)) the following:

"SEC. 414D. FINANCIAL ASSISTANCE FOR WAP EN-HANCEMENT AND INNOVATION.

"(a) PURPOSES.—The purposes of this section are-

"(1) to expand the number of dwelling units that are occupied by low-income persons that receive weatherization assistance under this section by making those dwelling units weatherization-ready;

"(2) to promote the deployment of renewable energy in dwelling units that are occupied by low-income persons;

"(3) to ensure healthy indoor environments by enhancing or expanding health and safety measures and resources available to dwellings that are occupied by low-income persons:

"(4) to disseminate new methods and best practices among eligible entities providing weatherization assistance under this section;

"(5) to encourage eligible entities providing weatherization assistance to hire and retain employees who are individuals-

"(A) from the community in which the assistance is provided; and

"(B) from communities or groups underrepresented in the home energy performance workforce.

"(b) Definition of Eligible Entity.—In this section, the term 'eligible entity' means-

"(1) an entity receiving funding from the Federal Government or from a State, Tribal,

- or local government through a weatherization assistance program under section 413 or 414: and
 - "(2) a nonprofit organization.
- "(c) FINANCIAL ASSISTANCE AWARDS.—The Secretary shall, to the extent funds are made available, award financial assistance on an annual basis through a competitive process to an eligible entity—
- "(1) with respect to dwelling units that are occupied by low-income persons—
- "(A) to implement measures to make those dwelling units weatherization-ready, including by addressing structural, plumbing, roofing, and electrical issues, environmental hazards, and other issues that the Secretary determines to be appropriate;
- "(B) to install energy efficiency technologies, including home energy management systems, smart devices, and other technologies the Secretary determines to be appropriate;
- "(C) to install renewable energy systems (as defined in section 415(c)(6)(A)); and
- "(D) to implement measures to ensure healthy indoor environments by improving indoor air quality, accessibility, and other healthy home measures, as determined by the Secretary:
- "(2) to improve the capability of the eligible entity—
- "(A) to significantly increase the number of energy retrofits performed by the eligible entity:
- "(B) to replicate best practices for work performed under this section on a larger scale:
- "(C) to leverage additional funds to sustain the provision of weatherization assistance and other work performed under this section after the financial assistance awarded under this section is expended; and
- "(D) to hire and retain employees described in subsection (a)(5);
- "(3) for innovative outreach and education regarding the benefits and availability of weatherization assistance and other assistance available under this section."
- "(4) for quality control of work performed under this section;
- "(5) for data collection, measurement, and verification with respect to that work;
- "(6) for program monitoring, oversight, evaluation, and reporting of that work;
- "(7) for labor, training, and technical assistance relating to that work;
- "(8) subject to subsection (g)(2), for planning, management, and administration of that work; and
- "(9) for any other appropriate activity, as determined by the Secretary.
- "(d) APPLICATIONS.—To be eligible for an award of financial assistance under this section, an eligible entity shall submit to the Secretary an application in such manner and containing such information as the Secretary may require.
- "(e) AWARD FACTORS.—In awarding financial assistance under this section, the Secretary shall consider—
- "(1) the record of the eligible entity, using the most recent year for which data are available, in constructing, renovating, repairing, and making energy efficient singlefamily, multifamily, or manufactured homes that are occupied by low-income persons, either directly or through affiliates, chapters, or other partners;
- "(2) the number of dwelling units occupied by low-income persons that the eligible entity has built, renovated, repaired, weatherized, and made more energy efficient in the 5 years immediately preceding the date on which the eligible entity submits an application under subsection (d);
- "(3) the qualifications, experience, and past performance of the eligible entity, in-

- cluding experience successfully managing and administering Federal funds;
- "(4) the strength of the proposal of the eligible entity to achieve one or more of the purposes described in subsection (a);
- "(5) the extent to which the eligible entity will use partnerships and regional coordination to achieve one or more of the purposes described in subsection (a);
- "(6) regional and climate zone diversity;
- ``(7) urban, suburban, and rural localities; and
- "(8) any other appropriate factor, as determined by the Secretary.
 "(f) FIRST AWARD.—Subject to the avail-
- "(f) FIRST AWARD.—Subject to the availability of appropriations, not later than 270 days after the date of enactment of this section, the Secretary shall make a first award of financial assistance under this section.
 - "(g) Amount and Term.—
- "(1) MAXIMUM AMOUNT.—The total amount of financial assistance awarded to an eligible entity under this section shall not exceed \$2,000,000.
- "(2) PLANNING, MANAGEMENT, AND ADMINISTRATION.—Of the amount awarded to an eligible entity under this section, not more than 15 percent may be used by the eligible entity for the purpose described in subsection (c)(8).
- "(3) TECHNICAL AND TRAINING ASSISTANCE.— The total amount of financial assistance awarded to an entity under this section shall be reduced by the cost of any technical and training assistance provided by the Secretary under this section that relates to that financial assistance.
- "(4) TERM.—The term of an award of financial assistance under this section shall not exceed 3 years.
- "(5) RELATIONSHIP TO FORMULA GRANTS.— An eligible entity may use financial assistance awarded under this section in conjunction with other financial assistance provided to the eligible entity under this part.
- "(h) GUIDANCE.—Not later than 90 days after the date of enactment of this section, the Secretary shall issue guidance on implementing this section, which shall include, with respect to eligible entities awarded financial assistance under this section—
 - "(1) standards for allowable expenditures;
- ``(2) a minimum saving-to-investment ratio; and
 - "(3) standards for-
 - "(A) training programs;
 - "(B) energy audits;
- "(C) the provision of technical assistance;
- "(D) monitoring activities carried out using the financial assistance;
- "(E) verification of energy and cost savings;
- "(F) liability insurance requirements; and
- "(G) recordkeeping and reporting requirements, which shall include reporting to the Office of Weatherization and Intergovernmental Programs of the Department of Energy applicable data on each dwelling unit retrofitted or otherwise assisted by the eligible entity using the financial assistance.
- "(i) COMPLIANCE WITH STATE AND LOCAL LAW.—Nothing in this section supersedes or modifies any State or local law to the extent that the State or local law is more stringent than this section.
- "(j) REVIEW AND EVALUATION.—The Secretary shall review and evaluate the performance of each eligible entity that receives an award of financial assistance under this section, which may include an audit.
- "(k) ANNUAL REPORT.—The Secretary shall submit to the relevant committees of Congress an annual report that describes—
- "(1) the actions taken by the Secretary and eligible entities awarded financial assistance under this section to achieve the purposes of this section during the year covered by the report; and

- "(2) the energy and cost savings, and any other accomplishments, achieved under this section during the year covered by the report.
 - "(1) Funding.-
- "(1) IN GENERAL.—Subject to paragraphs (2) and (3), for each of fiscal years 2021 through 2025, of the amount appropriated under section 422—
- "(A) if the amount is not more than \$225,000,000, no funds shall be used to carry out this section;
- "(B) if the amount is not more than \$260,000,000, not more than 2 percent of that amount may be used to carry out this section:
- "(C) if the amount is not more than \$300,000,000, not more than 4 percent of that amount may be used to carry out this section; and
- "(D) if the amount is more than \$300,000,000, not more than 6 percent of that amount may be used to carry out this section
- "(2) AMOUNTS EXCLUDED.—Each amount described in paragraph (1) shall not include the amount made available for Department of Energy headquarters training or technical assistance.
- "(3) MAXIMUM AMOUNT.—The maximum amount used to carry out this section in each fiscal year shall not exceed \$25,000,000.".
- (2) TABLE OF CONTENTS.—The table of contents for the Energy Conservation and Production Act (Public Law 94–385; 90 Stat. 1125) is amended by inserting after the item relating to section 414C (as added by subsection (c)(3)) the following:
- "Sec. 414D. Financial assistance for WAP enhancement and innovation.".
- (e) INCREASE IN ADMINISTRATIVE FUNDS.— Section 415(a)(1) of the Energy Conservation and Production Act (42 U.S.C. 6865(a)(1)) is amended by striking "10 percent" and inserting "15 percent".
- (f) REWEATHERIZATION DATE.—Section 415(c) of the Energy Conservation and Production Act (42 U.S.C. 6865(c)) is amended by striking paragraph (2) and inserting the following:
 - "(2) FURTHER ASSISTANCE.—
 - "(A) DEFINITION OF INTERIM SERVICE.-
- "(i) IN GENERAL.—In this paragraph, the term 'interim service' means an energy service that takes place between instances of weatherization or partial weatherization of a dwelling unit, as determined by the Secretary.
- "(ii) INCLUSION.—In this paragraph, the term 'interim service' includes—
- "(I) the provision of energy information and education to assist with energy management:
- "(II) an evaluation of the effectiveness of installed weatherization measures; and
- "(III) the provision of services, equipment, or other measures funded by non-Federal funds, as determined by the Secretary.
- "(B) FURTHER ASSISTANCE.—Dwelling units weatherized or partially weatherized under this part, or under other Federal programs—
- "(i) may not receive further financial assistance for weatherization under this part until the date that is 15 years after the date on which the previous weatherization was completed; and
- "(ii) may receive further financial assistance for weatherization under this part for the purpose of providing an interim service.".
- (g) TIMING FOR DISTRIBUTION OF FINANCIAL ASSISTANCE.—Section 417(d) of the Energy Conservation and Production Act (42 U.S.C. 6867(d)) is amended—
- (1) by striking "(d) Payments" and inserting the following:
 - "(d) METHOD AND TIMING OF PAYMENTS.—

- "(1) IN GENERAL.—Subject to paragraph (2), any payments"; and
- (2) by adding at the end the following:
- "(2) TIMING.—Notwithstanding any other provision of law (including regulations), not later than 60 days after the date on which funds have been made available to provide assistance under this part, the Secretary shall distribute to the applicable recipient the full amount of assistance to be provided to the recipient under this part for the fiscal year."
- (h) ANNUAL REPORT.—Section 421 of the Energy Conservation and Production Act (42 U.S.C. 6871) is amended in the second sentence by inserting "the number of multifamily buildings in which individual dwelling units were weatherized during the previous year, the number of individual dwelling units in multifamily buildings weatherized during the previous year," after "the average size of the dwellings being weatherized."
- (i) REAUTHORIZATION OF WAP.—Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended in the matter preceding paragraph (1) by striking "appropriated" and all that follows through "2012.." in paragraph (5) and inserting "appropriated \$350,000,000 for each of fiscal years 2021 through 2025."
 - (i) WAIVER STUDY .-
- (1) In General.—It is the sense of Congress that, to the maximum extent practicable, the Secretary should coordinate with the Director of the Office of Management and Budget to grant waivers of requirements under section 200.313 of title 2, Code of Federal Regulations (or successor regulations), to better leverage private sector funds for the purposes of using funding awarded under the Weatherization Assistance Program for Low-Income Persons established under part A of title IV of the Energy Conservation and Production Act (42 U.S.C. 6861 et seq.).
- (2) STUDY.—Not more than 180 days after the date of enactment of this Act, the Secretary shall submit to the relevant committees of Congress a report that describes—
- (A) each waiver that has been requested under paragraph (1) after September 30, 2010; and
- (B) the determination of the Secretary and the Director of the Office of Management and Budget regarding each waiver described in subparagraph (A).

Subtitle B—Renewable Energy

SEC. 1201. HYDROELECTRIC PRODUCTION INCENTIVES AND EFFICIENCY IMPROVEMENTS.

- (a) HYDROELECTRIC PRODUCTION INCENTIVES.—Section 242 of the Energy Policy Act of 2005 (42 U.S.C. 15881) is amended—
- (1) in subsection (b), by striking paragraph (1) and inserting the following:
- "(1) QUALIFIED HYDROELECTRIC FACILITY.— The term 'qualified hydroelectric facility' means a turbine or other generating device owned or solely operated by a non-Federal entity—
- "(A) that generates hydroelectric energy for sale; and
- $\mbox{``(B)(i)}$ that is added to an existing dam or conduit; or
- ``(ii)(I) that has a generating capacity of not more than 20 megawatts;
- "(II) for which the non-Federal entity has received a construction authorization from the Federal Energy Regulatory Commission, if applicable; and
- "(III) that is constructed in an area in which there is inadequate electric service, as determined by the Secretary, including by taking into consideration—
 - "(aa) access to the electric grid;
 - "((bb) the frequency of electric outages; or ((cc) the affordability of electricity.";

- (2) in subsection (c), by striking "10" and inserting "22":
- (3) in subsection (e)(2), by striking "section 29(d)(2)(B)" and inserting "section 45K(d)(2)(B)";
- (4) in subsection (f), by striking "20" and inserting "32"; and
- (5) in subsection (g), by striking "each of the fiscal years 2006 through 2015" and inserting "each of fiscal years 2021 through 2036".
- (b) HYDROELECTRIC EFFICIENCY IMPROVEMENT.—Section 243(c) of the Energy Policy Act of 2005 (42 U.S.C. 15882(c)) is amended by striking "each of the fiscal years 2006 through 2015" and inserting "each of fiscal years 2021 through 2036".

SEC. 1202. MARINE ENERGY RESEARCH AND DEVELOPMENT.

- (a) PURPOSE.—The purpose of this section is to support marine energy programs that—
- (1) promote research on, and the development of, increased energy generation and capacity at reduced costs;
- (2) promote research and development activities that improve environmental outcomes of marine energy technologies;
- (3) provide grid stability and create new market opportunities; and
- (4) promote job creation in the energy sector
- (b) DEFINITION OF MARINE ENERGY.-
- (1) IN GENERAL.—Section 632 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17211) is amended to read as follows:

"SEC. 632. DEFINITION OF MARINE ENERGY.
"In this subtitle, the term 'marine energy

- means energy from—
 "(1) waves, tides, and currents in oceans,
- estuaries, and tidal areas;
 "(2) free-flowing hydrokinetic water in rivers, lakes, and streams:
- "(3) free-flowing hydrokinetic water in man-made channels; and
- "(4) differentials in ocean temperature or ocean thermal energy conversion.".
- (2) Conforming edits.—
- (A) The subtitle heading for subtitle C of title VI of the Energy Independence and Security Act of 2007 (Public Law 110-440; 121 Stat. 1686) is amended by striking "and Hydrokinetic Renewable".
- (B) Section 631 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17001 note; 121 Stat. 1686) is amended by striking "and Hydrokinetic Renewable".
- (c) Marine Energy Research and Development.—Section 633 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17212) is amended to read as follows:

"SEC. 633. MARINE ENERGY RESEARCH AND DE-VELOPMENT.

- "(a) IN GENERAL.—The Secretary, acting through the Director of the Water Power Technologies Office, in consultation with the Secretary of the Interior, the Secretary of Commerce, and the Federal Energy Regulatory Commission, shall carry out a program to accelerate the introduction of marine energy production into the United States energy supply, giving priority to technologies most likely to lead to commercial utilization, while fostering accelerated research, development, demonstration, and commercial application of technology, including programs—
- "(1) to assist technology development on a variety of scales, including full-scale prototypes, to improve the components, processes, and systems used for power generation from marine energy resources;
- "(2) to establish and expand critical testing infrastructure and facilities necessary—
- "(A) to cost-effectively and efficiently test and prove marine energy devices; and
- "(B) to accelerate the technological readiness and commercialization of those devices;

- "(3) to support efforts to increase the efficiency of energy conversion, lower the cost, increase the use, improve the reliability, and demonstrate the applicability of marine energy technologies by participating in demonstration projects;
- "(4) to investigate variability issues and the efficient and reliable integration of marine energy with the utility grid;
- "(5) to identify and study critical shortand long-term needs to create a sustainable marine energy supply chain based in the United States:
- "(6) to increase the reliability and survivability of marine energy technologies:
- "(7) to verify the performance, reliability, maintainability, and cost of new marine energy device designs and system components in an operating environment;
- "(8) to consider the protection of critical infrastructure, such as adequate separation between marine energy devices and projects and submarine telecommunications cables, including consideration of established industry standards:
- "(9)(A) to coordinate the programs carried out under this section with, and avoid duplication of activities across, programs of the Department and other applicable Federal agencies, including National Laboratories; and
- "(B) to coordinate public-private collaboration in carrying out the programs under this section;
- "(10) to identify opportunities for joint research and development programs and the development of economies of scale between—
 - "(A) marine energy technologies; and
- "(B) other renewable energy and fossil energy programs, offshore oil and gas production activities, and activities of the Department of Defense;
- "(11) to identify, in conjunction with the Secretary of Commerce, acting through the Under Secretary of Commerce for Oceans and Atmosphere, and other relevant Federal agencies as appropriate, the potential environmental impacts, including potential impacts on fisheries and other marine resources, of marine energy technologies, measures to prevent adverse impacts, and technologies and other means available for monitoring and determining environmental impacts:
- "(12) to identify, in conjunction with the Secretary of the Department in which the United States Coast Guard is operating, acting through the Commandant of the United States Coast Guard, the potential navigational impacts of marine energy technologies and measures to prevent adverse impacts on navigation:
- "(13) to support in-water technology development with international partners using existing cooperative procedures (including memoranda of understanding)—
- "(A) to allow cooperative funding and other support of value to be exchanged and leveraged; and
- "(B) to encourage international research centers and international companies to participate in the development of marine energy technology in the United States and to encourage United States research centers and companies to participate in marine energy projects abroad; and
- "(14) to assist in the development of technology necessary to support the use of marine energy—
- "(A) for the generation and storage of power at sea, including in applications relating to—
 - "(i) ocean observation and navigation;
 - "(ii) underwater vehicle charging;
 - "(iii) marine aquaculture;
 - "(iv) production of marine algae; and
- "(v) extraction of critical minerals and gasses from seawater;

- "(B) for the generation and storage of power to promote the resilience of coastal communities, including in applications relating to—
 - "(i) desalination;
- "(ii) disaster recovery and resilience; and
- "(iii) community microgrids in isolated power systems; and
- "(C) in any other applications, as determined by the Secretary.
 "(b) COST SHARING AND MERIT REVIEW.—
- "(b) COST SHARING AND MERIT REVIEW.— The Secretary shall carry out the program under this section in accordance with sections 988 and 989 of the Energy Policy Act of 2005 (42 U.S.C. 16352, 16353)."
- (d) NATIONAL MARINE ENERGY CENTERS.— Section 634 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17213) is amended—
- (1) in the section heading, by striking "RE-NEWABLE ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION" and inserting "EN-ERGY";
- (2) by redesignating subsection (c) as subsection (d); and
- (3) by striking subsections (a) and (b) and inserting the following:
- "(a) CENTERS.—
- "(1) IN GENERAL.—The Secretary shall award grants to institutions of higher education for—
- "(A) the continuation and expansion of research, development, and testing activities at National Marine Energy Centers established as of January 1, 2019; and
- "(B) the establishment of new National Marine Energy Centers.
- "(2) CRITERIA.—In selecting locations for new National Marine Energy Centers to be established under paragraph (1)(B), the Secretary shall consider sites that meet one of the following criteria:
- "(A) The new Center hosts an existing marine energy research and development program in coordination with an engineering program at an institution of higher education.
- "(B) The new Center has proven expertise to support environmental and policy-related issues associated with the harnessing of energy in the marine environment.
- "(C) The new Center has access to and uses marine resources.
- "(b) PURPOSES.—The National Marine Energy Centers shall coordinate with other National Marine Energy Centers, the Department, and the National Laboratories—
- "(1) to advance research, development, and demonstration of marine energy technologies:
- "(2) to support in-water testing and demonstration of marine energy technologies, including facilities capable of testing—
- "(A) marine energy systems of various technology readiness levels and scales;
- "(B) a variety of technologies in multiple test berths at a single location; and
 - "(C) arrays of technology devices: and
- "(3) to serve as information clearinghouses for the marine energy industry by collecting and disseminating information on best practices in all areas relating to developing and managing marine energy resources and energy systems.
- "(c) COST SHARING.—The Secretary shall carry out the program under this section in accordance with section 988(b)(4) of the Energy Policy Act of 2005 (42 U.S.C. 16352(b)(4)).".
- (e) AUTHORIZATION OF APPROPRIATIONS.—Section 636 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17215) is amended by striking "\$50,000,000 for each of the fiscal years 2008 through 2012" and inserting "\$160,000,000 for each of fiscal years 2021 and 2022".
- (f) STUDY OF ENERGY INNOVATION IN MARINE TRANSPORTATION AND INFRASTRUCTURE RESILIENCE.—

- (1) IN GENERAL.—The Secretary, in consultation with the Secretary of Transportation and the Secretary of Commerce, shall conduct a study to examine opportunities for research and development in advanced marine energy technologies—
- (A) to support the maritime transportation sector to enhance job creation, economic development, and competitiveness;
- (B) to support associated maritime energy infrastructure, including infrastructure that serves ports, to improve system resilience and disaster recovery; and
- (C) to enable scientific missions at sea and in extreme environments, including the Arctic.
- (2) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that describes the results of the study conducted under paragraph (1).
- (g) CLERICAL AMENDMENTS.—The table of contents in section 1(b) of the Energy Independence and Security Act of 2007 (Public Law 110–140: 121 Stat. 1495) is amended—
- (1) by striking the item relating to subtitle C of title VI and inserting the following:
 - "Subtitle C—Marine Renewable Energy Technologies"; and
- (2) by striking the items relating to sections 632, 633, and 634 and inserting the following:
- "Sec. 632. Definition of marine energy.
- "Sec. 633. Marine energy research and development.
- "Sec. 634. National Marine Energy Centers.".

SEC. 1203. ADVANCED GEOTHERMAL INNOVATION LEADERSHIP.

- (a) UPDATE TO GEOTHERMAL RESOURCE ASSESSMENT.—Section 2501 of the Energy Policy Act of 1992 (30 U.S.C. 1028) is amended—
- (1) by redesignating subsections (a) and (b) as subsections (b) and (d), respectively:
- (2) by inserting before subsection (b) (as so redesignated) the following:
- "(a) DEFINITION OF ENHANCED GEOTHERMAL SYSTEMS.—In this section, the term 'enhanced geothermal systems' has the meaning given the term in section 612 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17191).":
- (3) by inserting after subsection (b) (as so redesignated) the following:
- "(c) UPDATE TO GEOTHERMAL RESOURCE ASSESSMENT.—The Secretary of the Interior, acting through the United States Geological Survey, and in consultation with the Secretary of Energy, shall update the 2008 tuited States geothermal resource assessment carried out by the United States Geological Survey, including—
- "(1) with respect to areas previously identified by the Department of Energy or the United States Geological Survey as having significant potential for hydrothermal energy or enhanced geothermal systems energy, by focusing on—
- "(A) improving the resolution of resource potential at systematic temperatures and depths, including temperatures and depths appropriate for power generation and direct use applications;
- "(B) quantifying the total potential to coproduce geothermal energy and minerals;
- "(C) incorporating data relevant to underground thermal energy storage and exchange, such as aquifer and soil properties;
- "(D) producing high resolution maps, including—
- "(i) maps that indicate key subsurface parameters for electric and direct use resources; and

- "(ii) risk maps for induced seismicity based on geologic, geographic, and operational parameters; and
- "(2) to the maximum extent practicable, by coordinating with relevant State officials and institutions of higher education to expand geothermal assessments, including enhanced geothermal systems assessments, to include assessments for the Commonwealth of Puerto Rico and the States of Alaska and Hawaii."; and
- (4) in subsection (d) (as so redesignated), by striking "necessary" and inserting "necessary".
- (b) GENERAL GEOTHERMAL RESEARCH AND DEVELOPMENT PROGRAMS.—Section 614 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17193) is amended by adding at the end the following:
- "(d) OIL AND GAS TECHNOLOGY TRANSFER INITIATIVE.—
- "(1) IN GENERAL.—The Secretary shall support an initiative among the Office of Fossil Energy, the Office of Energy Efficiency and Renewable Energy, and the private sector to modify, improve, and demonstrate the use in geothermal energy development of relevant advanced technologies and operation techniques used in the oil and gas sector.
- "(2) PRIORITIES.—In carrying out paragraph (1), the Secretary shall prioritize technologies with the greatest potential to significantly increase the use and lower the cost of geothermal energy in the United States, including the cost and speed of small-and large-scale geothermal drilling.
- "(e) COPRODUCTION OF GEOTHERMAL ENERGY AND MINERALS PRODUCTION PRIZE COMPETITION.—
- "(1) IN GENERAL.—The Secretary shall carry out a prize competition under which the Secretary shall award prizes to demonstrate the coproduction of critical minerals (as defined by the Secretary of the Interior on the date of enactment of the American Energy Innovation Act of 2020) from geothermal resources.
- "(2) REQUIREMENTS.—A demonstration awarded a prize under paragraph (1) shall—
- "(A) improve the cost-effectiveness of removing minerals from geothermal brines as part of the coproduction process;
- "(B) increase recovery rates of the targeted mineral commodity;
- "(C) decrease water use and other environmental impacts, as determined by the Secretary; and
- "(D) demonstrate a path to commercial viability.
- "(3) MAXIMUM PRIZE AMOUNT.—The maximum amount of a prize awarded under paragraph (1) shall be \$10,000,000.
 - "(f) DRILLING DATA REPOSITORY.—
- "(1) IN GENERAL.—The Secretary shall, in coordination with the Secretary of the Interior, establish and operate a voluntary, industry-wide repository of geothermal drilling information to lower the cost of future geothermal drilling.
 - "(2) Repository.—
- "(A) IN GENERAL.—In carrying out paragraph (1), the Secretary shall collaborate with geothermally significant countries, such as Iceland, Switzerland, Kenya, Australia, the Philippines, and any other relevant country, as determined by the Secretary.
- "(B) DATA SYSTEM.—The repository established under paragraph (1) shall be integrated with the National Geothermal Data System."
- (c) Enhanced Geothermal Research and Development.—
- (1) DEFINITION OF ENGINEERED.—Section 612(1) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17191(1)) is amended in the matter preceding subparagraph (A)

by striking "subjected to intervention, including intervention" and inserting "designed to access subsurface heat, including nonstimulation technologies,".

- (2) PROGRAMS.—Section 615(b) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17194(b)) is amended—
 - (A) in paragraph (1)—
- (i) in subparagraph (C), by striking "mapping" and inserting "and fracture mapping, including real-time modeling";
- (ii) in subparagraph (E), by striking "and" at the end:
- (iii) by redesignating subparagraph (F) as subparagraph (K); and
- (iv) by inserting after subparagraph (E) the following:
 - "(F) well placement and orientation;
 - "(G) long-term reservoir management;
- "(H) drilling technologies, methods, and tools:
- "(I) improved exploration tools;
- "(J) zonal isolation; and"; and
- $\left(B\right)$ by striking paragraph (2) and inserting the following:
- $\lq\lq\lq(2)$ Frontier observatories for research in Geothermal energy.—
- "(A) PROGRAM.—The Secretary shall support 2 field research sites, which shall each be known as a 'Frontier Observatory for Research in Geothermal Energy' or 'FORGE' site, to develop, test, and enhance techniques and tools for enhanced geothermal energy.
- "(B) SITE SELECTION.—Of the FORGE sites referred to in subparagraph (A)—
- "(i) 1 shall be the existing research site in Milford, Utah; and
- "(ii) 1 shall be-
- "(I) selected by the Secretary through a competitive selection process; and
- "(II) located in a different geologic type than the existing research site described in clause (i).
 - "(C) SITE OPERATION.—
- "(i) INITIAL DURATION.—The FORGE site selected under subparagraph (B)(ii) shall operate for an initial term of not more than 7 years after the date on which site preparation is complete.
- "(ii) PERFORMANCE METRICS.—The Secretary shall establish performance metrics for each FORGE site supported under this paragraph, which may be used by the Secretary to determine whether a FORGE site should continue to receive funding.
- "(D) ADDITIONAL TERMS.—
- "(i) IN GENERAL.—At the end of an operational term described in clause (ii), a FORGE site may—
- "(I) be transferred to other public or private entities for further enhanced geothermal testing; or
- "(II) subject to appropriations and a merit review by the Secretary, operate for an additional term of not more than 7 years.
- "(ii) OPERATIONAL TERM DESCRIBED.—An operational term referred to in clause (i)—
- "(I) in the case of the FORGE site designated under subparagraph (B)(i), is the existing operational term; and
- "(II) in the case of the FORGE site selected under subparagraph (B)(ii), is the initial term under subparagraph (C) or an additional term under clause (i)(II).
- ``(3) Enhanced geothermal systems demonstrations.—
- "(A) IN GENERAL.—Beginning on the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in collaboration with industry partners and institutions of higher education, shall support an initiative for demonstration of enhanced geothermal systems for power production or direct use.
 - "(B) Projects.—
- "(i) IN GENERAL.—Under the initiative described in subparagraph (A), not less than 4 demonstration projects shall be carried out

- in locations that are potentially commercially viable for enhanced geothermal systems development, as determined by the Secretary.
- "(ii) REQUIREMENTS.—Demonstration projects under clause (i) shall—
- "(I) collectively demonstrate—
- "(aa) different geologic settings, such as hot sedimentary aquifers, layered geologic systems, supercritical systems, and basement rock systems; and
- "(bb) a variety of development techniques, including open hole and cased hole completions, differing well orientations, and stimulation mechanisms:
- "(II) to the extent practicable, use existing sites where subsurface characterization or geothermal energy integration analysis has been conducted; and
- "(III) each be carried out in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).
- "(iii) EASTERN DEMONSTRATION.—Not less than 1 demonstration project under clause (i) shall be located in an area east of the Mississippi River that is suitable for enhanced geothermal demonstration for power, heat, or a combination of power and heat.
 - "(C) OPTIONAL PROGRAM STRUCTURE.-
- "(i) IN GENERAL.—The Secretary may, pursuant to section 646(g) of the Department of Energy Organization Act (42 U.S.C. 7256(g)), structure the initiative described in subparagraph (A) as a public-private cost-shared demonstration initiative with specific design milestones required to be met by a participant before costs are reimbursed by the Secretary.
- "(ii) REQUIREMENTS.—If the Secretary elects to carry out clause (i) for a demonstration project, the Secretary shall—
- "(I) request proposals from eligible entities, as determined by the Secretary, that include—
- "(aa) a business plan;
- "(bb) technical details; and
- ``(cc) proposed milestones and associated payments; and
 - "(II) select projects—
- "(aa) based on the demonstrated ability of the eligible entity to meet the milestones and associated payments described in the proposal of that eligible entity; and
- "(bb) that have the greatest potential commercial applicability.
- "(iii) AUTHORITY.—Notwithstanding section 646(g)(10) of the Department of Energy Organization Act (42 U.S.C. 7256(g)(10)), the Secretary shall have the authority to carry out clause (i) until the completion of the initiative described in subparagraph (A)."
- (d) Geothermal Heat Pumps and Direct Use.—
- (1) IN GENERAL.—Title VI of the Energy Independence and Security Act of 2007 is amended by inserting after section 616 (42 U.S.C. 17195) the following:

"SEC. 616A. GEOTHERMAL HEAT PUMPS AND DIRECT USE RESEARCH AND DEVELOPMENT.

- ``(a) PURPOSES.—The purposes of this section are—
- "(1) to improve the components, processes, and systems used for geothermal heat pumps and the direct use of geothermal energy; and
- "(2) to increase the energy efficiency, lower the cost, increase the use, and improve and demonstrate the applicability of geothermal heat pumps to, and the direct use of geothermal energy in, large buildings, commercial districts, residential communities, and large municipal, agricultural, or industrial projects.
 - "(b) Definitions.—In this section:
- "(1) DIRECT USE OF GEOTHERMAL ENERGY.— The term 'direct use of geothermal energy' means geothermal systems that use water

- directly or through a heat exchanger to pro-
 - "(A) heating to buildings; or
- "(B) heat required for industrial processes, agriculture, aquaculture, and other facilities.
- "(2) ECONOMICALLY DISTRESSED AREA.—The term 'economically distressed area' means an area described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a)).
- "(3) GEOTHERMAL HEAT PUMP.—The term 'geothermal heat pump' means a system that provides heating and cooling by exchanging heat from shallow ground or surface water using—
- "(A) a closed loop system, which transfers heat by way of buried or immersed pipes that contain a mix of water and working fluid; or
- "(B) an open loop system, which circulates ground or surface water directly into the building and returns the water to the same aquifer or surface water source.
 - "(c) Program.—
- "(1) IN GENERAL.—The Secretary shall support within the Geothermal Technologies Office a program of research, development, and demonstration for geothermal heat pumps and the direct use of geothermal energy.
- "(2) AREAS.—The program under paragraph (1) may include research, development, demonstration, and commercial application of—
- "(A) geothermal ground loop efficiency improvements, cost reductions, and improved installation and operations methods;
- "(B) the use of geothermal energy for building-scale energy storage;
- "(C) the use of geothermal energy as a grid management resource or seasonal energy storage;
- "(D) geothermal heat pump efficiency improvements;
- "(E) the use of alternative fluids as a heat exchange medium, such as hot water found in mines and mine shafts, graywater, or other fluids that may improve the economics of geothermal heat pumps;
- "(F) heating of districts, neighborhoods, communities, large commercial or public buildings, and industrial and manufacturing facilities;
- "(G) the use of water sources at a temperature of less than 150 degrees Celsius for direct use; and
- "(H) system integration of direct use with geothermal electricity production.
- "(3) ENVIRONMENTAL IMPACTS.—In carrying out the program, the Secretary shall identify and mitigate potential environmental impacts in accordance with section 614(c).
 - "(d) FINANCIAL ASSISTANCE.—
- "(1) IN GENERAL.—The Secretary shall make financial assistance available to State, local, and Tribal governments, institutions of higher education, nonprofit entities, National Laboratories, utilities, and for-profit companies to promote the development of geothermal heat pumps and the direct use of geothermal energy.
- "(2) PRIORITY.—In providing financial assistance under this subsection, the Secretary shall give priority to proposals that apply to large buildings, commercial districts, and residential communities that are located in economically distressed areas."
- (2) CLERICAL AMENDMENT.—The table of contents in section 1(b) of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1495) is amended by inserting after the item relating to section 616 the following:
- "Sec. 616A. Geothermal heat pumps and direct use research and development.".
- (e) Modifying the Definition of Renewable Energy to Include Thermal Energy.—

- (1) IN GENERAL.—Section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852) is amended—
- (A) in subsection (b)(2), by striking "generated" and inserting "produced"; and

(B) in subsection (c)-

- (i) by redesignating paragraphs (1) through (3) as subparagraphs (A) through (C), respectively, and indenting appropriately;
- (ii) in the matter preceding subparagraph (A) (as so redesignated), by striking "For purposes" and inserting the following:
 - "(1) IN GENERAL.—For purposes"; and
 - (iii) by adding at the end the following:
 - "(2) SEPARATE CALCULATION.—
- "(A) IN GENERAL.—For purposes of determining compliance with the requirement of this section, any energy consumption that is avoided through the use of geothermal energy shall be considered to be renewable energy produced.
- "(B) EFFICIENCY ACCOUNTING.—Energy consumption that is avoided through the use of geothermal energy that is considered to be renewable energy under this section shall not be considered energy efficiency for the purpose of compliance with Federal energy efficiency goals, targets, and incentives."
- (2) CONFORMING AMENDMENT.—Section 2410q(a) of title 10, United States Code, is amended by striking "section 203(b)(2) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)(2))" and inserting "section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b))".
- (f) AUTHORIZATION OF APPROPRIATIONS.—Section 623 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17202) is amended by striking "\$90,000,000" in the first sentence and all that follows through the period at the end of the second sentence and inserting the following: "\$165,000,000 for each of fiscal years 2021 through 2025, of which—
- ``(1) \$5,000,000 each fiscal year shall be for the prize competition under section 614(e); and
- "(2) \$1,000,000 each fiscal year shall be for the drilling data repository under section 614(f)."
- (g) REAUTHORIZATION OF HIGH COST REGION GEOTHERMAL ENERGY GRANT PROGRAM.—Section 625 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17204) is amended—
- (1) in subsection (a)(2), by inserting "or heat" after "electrical power"; and
- (2) by striking subsection (e) and inserting the following:
- "(e) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2021 through 2025."
- (h) NATIONAL GOALS FOR PRODUCTION ON FEDERAL LAND.—
- (1) IN GENERAL.—Not later than September 1, 2022, the Secretary of the Interior shall, in consultation with the Secretary, the Secretary of Agriculture, and other heads of relevant Federal agencies, establish national goals for geothermal energy capacity on public land.
- (2) GEOTHERMAL ENERGY DEVELOPMENT.—The Director of the Bureau of Land Management, in consultation with other appropriate Federal officials, shall take any actions that the Director of the Bureau of Land Management determines necessary to facilitate geothermal energy development, consistent with applicable laws.
- (i) FACILITATION OF COPRODUCTION OF GEOTHERMAL ENERGY ON OIL AND GAS LEASES.—Section 4(b) of the Geothermal Steam Act of 1970 (30 U.S.C. 1003(b)) is amended by adding at the end the following:
- "(4) LAND SUBJECT TO OIL AND GAS LEASE.— Land under an oil and gas lease issued pursuant to the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Mineral Leasing Act for Ac-

- quired Lands (30 U.S.C. 351 et seq.) that is subject to an approved application for permit to drill and from which oil and gas production is occurring may be available for noncompetitive leasing under this section to the holder of the oil and gas lease—
 - "(A) on a determination that-
- "(i) geothermal energy will be produced from a well producing or capable of producing oil and gas; and
- "(ii) national energy security will be improved by the issuance of such a lease; and
- "(B) to provide for the coproduction of geothermal energy with oil and gas.".
- (j) GEOTHERMAL RESOURCE CONFIRMATION TEST PROJECTS.—
- (1) IN GENERAL.—The Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) is amended by adding at the end the following:

"SEC. 30. GEOTHERMAL RESOURCE CONFIRMATION TEST PROJECTS.

- "(a) DEFINITIONS.—In this section:
- "(1) EXTRAORDINARY CIRCUMSTANCES.—The term 'extraordinary circumstances' has the same meaning given the term in the Department of the Interior Departmental Manual, 516 DM 2.3A(3) and 516 DM 2, Appendix 2 (or successor provisions).
- "(2) GEOTHERMAL RESOURCE CONFIRMATION TEST PROJECT.—The term 'geothermal resource confirmation test project' means a project of drilling not more than 3 wells into a reservoir to test or explore for geothermal resources—
- "(A) on land for which the Secretary has issued a lease under this Act; and
 - "(B) that—
- "(i) is carried out by the holder of the lease:
- "(ii) allows for well testing, such as to confirm temperature, pressure, chemistry, flow rate, and near-wellbore and overall reservoir permeability;
- "(iii) causes-
- "(I) less than 2.5 acres of soil or vegetation disruption at the location of each geothermal exploration well; and
- "(II) not more than an additional 5 acres of soil or vegetation disruption during access to or egress from the test site;
- "(iv) is less than 9 inches in bottom-hole diameter:
- "(v) is developed—
- "(I) in a manner that does not require offroad motorized access other than to and from the well site along an identified offroad route; and
- $\lq\lq(II)$ without the use of high-pressure well stimulation;
- "(vi) includes the removal of any surface infrastructure other than the wellhead from the site not later than 90 days after the project is completed; and
- "(vii) requires, not later than 42 months after the date on which the first exploration drilling began, the restoration of the project site to approximately the condition that existed at the time the project begins, unless the site is subsequently used as part of an energy development under the lease.
- "(b) CATEGORICAL EXCLUSION.—Unless extraordinary circumstances exist, a project that the Secretary determines under subsection (c) is a geothermal resource confirmation test project shall be categorically excluded from the requirements for an environmental assessment or an environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) or section 1508.4 of title 40, Code of Federal Regulations (or a successor regulation)
 - "(c) Process.-
- "(1) REQUIREMENT TO PROVIDE NOTICE.—A leaseholder shall provide notice to the Secretary of the intent of the leaseholder to carry out a geothermal resource confirma-

- tion test project at least 30 days before the start of drilling under the project.
- "(2) REVIEW AND DETERMINATION.—Not later than 30 days after receipt of a notice of intent under paragraph (1), the Secretary shall, with respect to the project described in the notice of intent—
- "(A) determine if the project is a geothermal resource confirmation test project;
- "(B) notify the leaseholder of such determination; and
- $\mbox{\ensuremath{^{\prime\prime}}}(C)$ provide public notice of the determination.
- "(3) OPPORTUNITY TO REMEDY.—If the Secretary determines under paragraph (2)(A) that the project is not a geothermal resource confirmation test project, the Secretary shall—
- "(A) include in such notice clear and detailed findings on any deficiencies in the project that resulted in such determination; and
- "(B) allow the leaseholder to remedy any such deficiencies and resubmit the notice of intent under paragraph (1).".
- (2) REPEAL.—The Geothermal Energy Research, Development, and Demonstration Act of 1974 (30 U.S.C. 1101 et seg.) is repealed.
- Act of 1974 (30 U.S.C. 1101 et seq.) is repealed. (k) PROGRAM TO IMPROVE FEDERAL GEOTHERMAL PERMIT COORDINATION.—
 - (1) DEFINITIONS.—In this subsection:
- (A) PROGRAM.—The term "Program" means the Geothermal Energy Permitting Coordination Program established under paragraph (2).
- (B) SECRETARY.—The term "Secretary" means the Secretary of the Interior.
- (2) ESTABLISHMENT OF PROGRAM.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a program, to be known as the "Geothermal Energy Permitting Coordination Program", to improve Federal permit coordination and reduce regulatory timelines with respect to geothermal energy projects on Federal land by increasing the expertise of officials administering and approving permits.
- (3) ESTABLISHMENT OF PROGRAM OFFICES.— To carry out the Program, the Secretary shall establish 1 or more Program offices at State or district offices of the Department of the Interior
 - (4) Memorandum of understanding.-
- (A) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary shall enter into a memorandum of understanding for purposes of this subsection with—
 - (i) the Secretary of Agriculture;
- (ii) the Administrator of the Environmental Protection Agency; and
 - (iii) the Secretary of Defense.
- (B) STATE PARTICIPATION.—The Secretary may request that the Governor of any State be a signatory to the memorandum of understanding under subparagraph (A).
 - (5) DESIGNATION OF QUALIFIED STAFF.-
- (A) IN GENERAL.—Not later than 30 days after the date on which the memorandum of understanding under paragraph (4) is executed, all Federal signatories, as appropriate, shall assign to each Program office established under paragraph (3) 1 or more employees who have expertise in the regulatory issues relating to the office or agency in which the employee is employed, including, as applicable, particular expertise in—
- (i) consultation regarding, and preparation of, biological opinions under section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1536);
- (ii) permits under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);
- (iii) regulatory matters under the Clean Air Act (42 U.S.C. 7401 et seq.);
- (iv) the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.);

- (v) planning under section 14 of the National Forest Management Act of 1976 (16 U.S.C. 472a);
- (vi) developing geothermal resources under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.); and
- (vii) the preparation of analyses under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).
- (B) DUTIES.—Each employee assigned under subparagraph (A) shall-
- (i) not later than 90 days after the date on which the employee is assigned, report to the State Director of the Bureau of Land Management for the State in which the office to which the employee is assigned is located;
- (ii) be responsible for all issues relating to the jurisdiction of the home office or agency of the employee; and
- (iii) participate as part of the team of personnel working on proposed energy projects, planning, and environmental analyses.
- (6) Additional Personnel.—The Secretary shall assign to each Program office any additional personnel that are necessary to ensure the effective implementation of—
- (A) the Program; and
- (B) any program administered by the Program office, including inspection and enforcement relating to energy development on Federal land, in accordance with the multiple use mandate of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et
- (7) TRANSFER OF FUNDS.—To facilitate the coordination and processing of geothermal permits on Federal land under the administration of a Program office, the Secretary may authorize the expenditure or transfer of any funds that are necessary to-
- (A) the United States Fish and Wildlife Service:
- (B) the Bureau of Indian Affairs;
- (C) the Forest Service:
- (D) the Environmental Protection Agency:
- (E) the Corps of Engineers:
- (F) the Department of Defense: or
- (G) any State in which a geothermal project is located.
- (8) REPORTS —Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to Congress a report that describes-
 - (A) the progress of the Program; and
- (B) any problems relating to leasing, permitting, or siting with respect to geothermal energy development on Federal land.
- (9) SAVINGS CLAUSE.—Nothing in this subsection affects-
- (A) the operation of any Federal or State law: or
- (B) any delegation of authority made by the head of a Federal agency any employee of which is participating in the Program.

SEC. 1204. WIND ENERGY RESEARCH AND DEVEL-OPMENT.

- (a) Definitions.—In this section:
- (1) ECONOMICALLY DISTRESSED AREA.—The term "economically distressed area" means an area described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a)).
- (2) ELIGIBLE ENTITY.—The term "eligible entity" means-
 - (A) an institution of higher education;
 - (B) a National Laboratory;
 - (C) a Federal research agency;
 - (D) a State research agency;
- (E) a research agency associated with a territory or freely associated state;
- (F) a tribal energy development organiza-
- (G) an Indian tribe;
- (H) a tribal organization;
- (I) a Native Hawaiian community-based organization;
 - (J) a nonprofit research organization;
 - (K) an industrial entity;

- (L) any other entity, as determined by the Secretary; and
- (M) a consortium of 2 or more entities described in subparagraphs (A) through (L).
- (3) INDIAN TRIBE.—The term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).
- (4) Institution of higher education. term "institution of higher education" has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)
- (5) NATIVE HAWAIIAN COMMUNITY-BASED OR-GANIZATION.—The term "Native Hawaiian community-based organization" has the meaning given the term in section 6207 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7517).
- (6) PROGRAM.—The term "program" means the program established under subsection (b)(1).
- (7) TERRITORY OR FREELY ASSOCIATED STATE.—The term "territory or freely associated state" has the meaning given the term "insular area" in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103).
- (8) Tribal energy development organiza-TION.—The term "tribal energy development organization" has the meaning given the term in section 2601 of the Energy Policy Act of 1992 (25 U.S.C. 3501).
- (9) TRIBAL ORGANIZATION.—The term "tribal organization" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).
- (b) WIND ENERGY TECHNOLOGY PROGRAM.-
- (1) Establishment.
- (A) IN GENERAL.—The Secretary shall establish a program to conduct research, development, testing, evaluation, demonstration, and commercialization of wind energy technologies in accordance with this subsection.
- (B) PURPOSES.—The purposes of the program are the following:
- (i) To improve the energy efficiency, cost effectiveness, reliability, resilience, security, integration, manufacturability, and recyclability of wind energy technologies.
- (ii) To optimize the performance and operation of wind energy components, turbines, and systems, including through the development of new materials, hardware, and software.
- (iii) To optimize the design and adaptability of wind energy technologies to the broadest practical range of geographic, atmospheric, offshore, and other site conditions, including-
- (I) at varying hub heights; and
- (II) through the use of computer modeling.
- (iv) To support the integration of wind energy technologies with-
- (I) the electric grid, including transmission, distribution, microgrids, and distributed energy systems; and
- (II) other energy technologies and systems, such as-
 - (aa) other generation sources:
- (bb) demand response technologies;
- (cc) energy storage technologies; and
- (dd) hybrid systems.
- (v) To reduce the cost and risk across the lifespan of wind energy technologies, includ-
- (I) manufacturing, permitting, construction, operations, maintenance, and recycling; and
- (II) through the development of solutions to transportation barriers to wind compo-
- (vi) To reduce and mitigate any potential negative impacts of wind energy technologies on-
 - (I) human communities;
 - (II) military operations;
 - (III) aviation;

- (IV) radar; and
- (V) wildlife and wildlife habitats.
- (vii) To address barriers to the commercialization and export of wind energy technologies
- (viii) To support the domestic wind industry, workforce, and supply chain.
- (C) TARGETS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish targets for the program relating to near-term (up to 2 years), mid-term (up to 7 years), and long-term (up to 15 years) challenges to the advancement of wind energy technologies, including onshore, offshore, distributed, and off-grid technologies.
 - (2) ACTIVITIES —
- (A) Types of activities.—In carrying out the program, the Secretary shall carry out research, development, demonstration, and commercialization activities, including-
- (i) awarding grants and awards, on a competitive, merit-reviewed basis;
- (ii) performing precompetitive research and development;
- (iii) establishing or maintaining demonstration facilities and projects, including through stewardship of existing facilities such as the National Wind Test Center;
- (iv) providing technical assistance:
- (v) entering into contracts and cooperative agreements:
- (vi) providing small business vouchers:
- (vii) conducting education and outreach activities:
- (viii) conducting workforce development activities: and
- (ix) conducting analyses, studies, and reports.
- (B) SUBJECT AREAS.—The Secretary shall carry out research, development, testing, evaluation, demonstration, and commercialization activities in the following subject areas:
- (i) Wind power plant performance, operations, and security.
- (ii) New materials and designs relating to all hardware, software, and components of wind energy technologies, including alternatives to minerals and other commodities from foreign sources that are determined to be vulnerable to disruption.
- (iii) Advanced wind energy manufacturing technologies and practices, including materials, processes, and design.
- (iv) Offshore wind-specific projects and plants, including-
- (I) the deep water floating systems, materials, components, and operation of offshore facilities: and
- (II) the monitoring and analysis of site and environmental considerations unique to offshore sites.
- (v) Integration of wind energy technologies with-
- (I) the electric grid, including transmission, distribution, microgrids, and distributed energy systems; and
 - (II) other energy technologies, including-(aa) other generation sources;
 - (bb) demand response technologies; and
 - (cc) energy storage technologies.
- (vi) Methods to improve the lifetime, maintenance, recycling, and reuse of wind energy components and systems.
- (vii) Wind power forecasting and atmospheric measurement systems, including for turbines and plant systems of varying height.
- (viii) Hybrid wind energy systems, gridconnected and off-grid, that incorporate di-
 - (I) generation sources;
 - (II) loads: and
 - (III) storage technologies.
- (ix) Reducing, including through education and outreach activities, market barriers to the adoption of wind energy technologies,

- such as impacts on, or challenges relating to—
- (I) distributed wind technologies, including the development of best practices, models, and voluntary streamlined processes for local permitting of distributed wind energy systems to reduce costs:
 - (II) airspace;
 - (III) military uses;
 - (IV) radar:
 - (V) local communities;
 - (VI) wildlife and wildlife habitats; and
- (VII) any other appropriate matter, as determined by the Secretary.
- (x) Advanced physics-based and data analysis computational tools, in coordination with the high-performance computing programs of the Department.
- (xi) Technologies for distributed wind, including micro, small, and medium turbines and the components of those turbines.
- (xii) Transformational technologies for harnessing wind energy.
- (xiii) Other research areas that advance the purposes of the program, as determined by the Secretary.
- (C) PRIORITIZATION.—In carrying out activities under the program, the Secretary shall give priority to projects that—
- (i) are located in geographically diverse regions of the United States;
- (ii) support the development or demonstration of projects—
- (I) in collaboration with tribal energy development organizations, Indian tribes, tribal organizations, Native Hawaiian community-based organizations, or territories or freely associated states; or
 - (II) in economically distressed areas;
- (iii) can be replicated in a variety of regions and climates; and
- (iv) include business commercialization plans that have the potential for— $\,$
- (I) domestic manufacturing and production of wind energy technologies; or
- (II) exports of wind energy technologies.
- (D) COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate activities under the program with other relevant programs and capabilities of the Department and other Federal research programs.
- (3) WIND TECHNICIAN TRAINING GRANT PROGRAM.—The Secretary may award grants, on a competitive basis, to eligible entities to purchase large pieces of wind component equipment, such as nacelles, towers, and blades, for use in training wind technician students in onshore or offshore wind applications.
- (4) Wages.—Notwithstanding any other provision of law, all laborers and mechanics employed by contractors or subcontractors on projects funded by grants under this subsection shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality, as determined by the Secretary of Labor, in accordance with subchapter IV of chapter 31 of title 40, United States Code.
- (5) WIND ENERGY PROGRAM STRATEGIC VISION.—
- (A) IN GENERAL.—Not later than September 1, 2022, and every 6 years thereafter, the Secretary shall submit to Congress a report on the strategic vision, progress, goals, and targets of the program, including assessments of wind energy markets and manufacturing.
- (B) PREPARATION.—The Secretary shall coordinate the preparation of the report under subparagraph (A) with—
 - (i) existing peer review processes;
- (ii) studies conducted by the National Laboratories; and
- (iii) the multiyear program planning required under section 994 of the Energy Policy Act of 2005 (42 U.S.C. 16358).

- (6) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the program \$120,000,000 for each of fiscal years 2021 through 2025.
- (c) Conforming Amendments.—
- (1) Section 4 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12003) is amended—
- (A) in the section heading by striking 'WIND,';
- (B) in subsection (a)—
- (i) in the matter preceding paragraph (1), by striking "wind,";
 - (ii) by striking paragraph (1); and
- (iii) by redesignating paragraphs (2) through (5) as paragraphs (1) through (4), respectively; and
- (C) in subsection (c), in the matter preceding paragraph (1), by striking "the Wind Energy Research Program,".
- (2) Section 931(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16231(a)(2)) is amended—
- (A) by striking subparagraph (B); and
- (B) by redesignating subparagraphs (C) through (E) as subparagraphs (B) through (D), respectively.
- (3) Section 636 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17215) is amended by striking "section 931(a)(2)(E)(i)" and all that follows through the period at the end and inserting "subparagraph (D)(i) of section 931(a)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16231(a)(2))."

SEC. 1205. SOLAR ENERGY RESEARCH AND DEVELOPMENT.

- (a) DEFINITIONS.—In this section:
- (1) ECONOMICALLY DISTRESSED AREA.—The term "economically distressed area" means an area described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a)).
- (2) ELIGIBLE ENTITY.—The term "eligible entity" means—
 - (A) an institution of higher education;
- (B) a National Laboratory;
- (C) a Federal research agency;
- (D) a State research agency;
- (E) a research agency associated with a territory or freely associated state;
- (F) a tribal energy development organization;
- (G) an Indian tribe;
- (H) a tribal organization;
- (I) a Native Hawaiian community-based organization;
- (J) a nonprofit research organization;
- (K) an industrial entity:
- (L) any other entity, as determined by the Secretary: and
- (M) a consortium of 2 or more entities described in subparagraphs (A) through (L).
- (3) INDIAN TRIBE.—The term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act. (25 U.S.C. 5304).
- (4) Institution of Higher Education.—The term "institution of higher education" has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).
- (5) NATIVE HAWAHAN COMMUNITY-BASED ORGANIZATION.—The term "Native Hawahian community-based organization" has the meaning given the term in section 6207 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7517).
- (6) PHOTOVOLTAIC DEVICE.—The term "photovoltaic device" means—
- (A) a device that converts light directly into electricity through a solid-state, semi-conductor process;
- (B) the photovoltaic cells of a device described in subparagraph (A); and
- (C) the electronic and electrical components of a device described in subparagraph

- (7) PROGRAM.—The term "program" means the program established under subsection (b)(1)(A).
- (8) SOLAR ENERGY.—The term "solar energy" means—
- (A) thermal or electric energy derived from radiation from the Sun; or
- (B) energy resulting from a chemical reaction caused by radiation recently originated in the Sun.
- (9) TERRITORY OR FREELY ASSOCIATED STATE.—The term "territory or freely associated state" has the meaning given the term "insular area" in section 1404 of the Food and Agriculture Act of 1977 (7 U.S.C. 3103).
- (10) TRIBAL ENERGY DEVELOPMENT ORGANIZATION.—The term "tribal energy development organization" has the meaning given the term in section 2601 of the Energy Policy Act of 1992 (25 U.S.C. 3501).
- (11) TRIBAL ORGANIZATION.—The term "tribal organization" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).
- (b) Solar Energy Technology Program.—
- (1) ESTABLISHMENT.
- (A) IN GENERAL.—The Secretary shall establish a program to conduct research, development, testing, evaluation, demonstration, and commercialization of solar energy technologies in accordance with this subsection.
- (B) PURPOSES.—The purposes of the program are the following:
- (i) To improve the energy efficiency, cost effectiveness, reliability, resilience, security, integration, manufacturability, and recyclability of solar energy technologies.
- (ii) To optimize the performance and operation of solar energy components, cells, and systems, and enabling technologies, including through the development of new materials, hardware, and software.
- (iii) To optimize the design and adaptability of solar energy systems to the broadest practical range of geographic and atmospheric conditions.
- (iv) To support the integration of solar energy technologies with the electric grid and complementary energy technologies.
- (v) To create and improve the conversion of solar energy to other useful forms of energy or other products.
- (vi) To reduce and mitigate any potential negative impacts of solar energy technologies on humans, wildlife, and wildlife habitats.
- (vii) To address barriers to the commercialization and export of solar energy technologies.
- (viii) To support the domestic solar industry, workforce, and supply chain.
- (C) TARGETS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish targets for the program to address near-term (up to 2 years), mid-term (up to 7 years), and long-term (up to 15 years) challenges to the advancement of solar energy systems.
 - (2) ACTIVITIES.—
- (A) TYPES OF ACTIVITIES.—In carrying out the program, the Secretary shall carry out research, development, demonstration, and commercialization activities, including—
- (i) awarding grants and awards, on a competitive, merit-reviewed basis;
- (ii) performing precompetitive research and development;
- (iii) establishing or maintaining demonstration facilities and projects, including through stewardship of existing facilities;
 - (iv) providing technical assistance;
- (v) entering into contracts and cooperative agreements;
- (vi) providing small business vouchers;
- (vii) establishing prize competitions;
- (viii) conducting education and outreach activities; and

- (ix) conducting analyses, studies, and reports.
- (B) SUBJECT AREAS.—The Secretary shall carry out research, development, testing, evaluation, demonstration, and commercialization activities in the following subject areas:
- (i) Advanced solar energy technologies, including— $\,$
- (I) new materials, components, designs, and systems, including perovskites;
- (II) advanced photovoltaic and thin-film devices;
- (III) concentrated solar power;
- (IV) solar heating and cooling; and
- (V) enabling technologies for solar energy systems, including hardware and software.
- (ii) Solar energy technology performance, operations, and security.
- (iii) Integration of solar energy technologies with—
- (I) the electric grid, including transmission, distribution, microgrids, and distributed energy systems:
- (II) other energy technologies, including-
- (aa) other generation sources:
- (bb) demand response technologies; and
- (cc) energy storage technologies; and
- (III) other nonelectric applications, such as in the agriculture, transportation, industrial, and fuels sectors.
- (iv) Advanced solar energy manufacturing technologies and practices, including materials, processes, and design.
- (v) Methods to improve the lifetime, maintenance, recycling, and reuse of solar energy components and systems.
- (vi) Solar energy forecasting, modeling, and atmospheric measurement systems, including for small-scale, large-scale, and aggregated systems.
- (vii) Hybrid solar energy systems that incorporate diverse—
 - (I) generation sources;
 - (II) loads; and
 - (III) storage technologies.
- (viii) Reducing market barriers to the adoption of solar energy technologies, including impacts on, or challenges relating to—
- (I) distributed solar technologies, including the development of best practices, models, and voluntary streamlined processes for local permitting of distributed solar energy systems to reduce costs:
 - (II) local communities;
- (III) wildlife and wildlife habitats; and
- (IV) any other appropriate matter, as determined by the Secretary.
- (ix) Transformational technologies for harnessing solar energy.
- (x) Other research areas that advance the purposes of the program, as determined by the Secretary.
- (C) PRIORITIZATION.—In carrying out activities under the program, the Secretary shall give priority to projects that—
- (i) are located in a geographically diverse range of eligible entities;
- (ii) support the development or demonstration of projects—
- (I) in collaboration with tribal energy development organizations, Indian tribes, tribal organizations, Native Hawaiian community-based organizations, or territories or freely associated states; or
- (II) in economically distressed areas;
- (iii) can be replicated in a variety of regions and climates; and
- (iv) include business commercialization plans that have the potential for— $\,$
- (I) domestic manufacturing and production of solar energy technologies; or
- (II) exports of solar energy technologies.
- (D) COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate activities under the program with other relevant programs and capabilities of the De-

- partment and other Federal research programs.
- (E) USE OF FUNDS.—To the extent that funding is not otherwise available through other Federal programs or power purchase agreements, funding awarded under this paragraph may be used for additional non-technology costs, as determined to be appropriate by the Secretary, such as engineering or feasibility studies.
- (3) ADVANCED SOLAR ENERGY MANUFACTURING INITIATIVE.—
- (A) GRANTS.—In addition to the program activities described in paragraph (2), in carrying out the program, the Secretary shall award multiyear grants to eligible entities for research, development, and demonstration projects to advance new solar energy manufacturing technologies and techniques.
- (B) PRIORITY.—In awarding grants under subparagraph (A), to the extent practicable, the Secretary shall give priority to solar energy manufacturing projects that—
- (i) increase efficiency and cost effectiveness in—
- (I) the manufacturing process; and
- (II) the use of resources.
- (ii) support domestic supply chains for materials and components;
- (iii) identify and incorporate nonhazardous alternative materials for components and devices;
- (iv) operate in partnership with tribal energy development organizations, Indian tribes, tribal organizations, Native Hawaiian community-based organizations, or territories or freely associated states; or
- $\left(v\right)$ are located in economically distressed areas.
- (C) EVALUATION.—Not later than 3 years after the date of enactment of this Act, and every 4 years thereafter, the Secretary shall conduct, and make available to the public and the relevant committees of Congress, an independent review of the progress of the grants awarded under subparagraph (A).
- (4) SOLAR ENERGY TECHNOLOGY RECYCLING RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.—
- (A) IN GENERAL.—In addition to the program activities described in paragraph (2), in carrying out the program, the Secretary shall award multiyear grants to eligible entities for research, development, and demonstration projects to create innovative and practical approaches to increase the reuse and recycling of solar energy technologies, including—
- (i) by increasing the efficiency and cost effectiveness of the recovery of raw materials from solar energy technology components and systems, including enabling technologies such as inverters;
- (ii) by minimizing environmental impacts from the recovery and disposal processes;
- (iii) by addressing any barriers to the research, development, demonstration, and commercialization of technologies and processes for the disassembly and recycling of solar energy devices;
- (iv) by developing alternative materials, designs, manufacturing processes, and other aspects of solar energy technologies and the disassembly and resource recovery process that enable efficient, cost effective, and environmentally responsible disassembly of, and resource recovery from, solar energy technologies; and
- (v) strategies to increase consumer acceptance of, and participation in, the recycling of photovoltaic devices.
- (B) DISSEMINATION OF RESULTS.—The Secretary shall make available to the public and the relevant committees of Congress the results of the projects carried out through grants awarded under subparagraph (A), including any educational and outreach materials.

- (5) SOLAR ENERGY TECHNOLOGY MATERIALS PHYSICAL PROPERTY DATABASE.—
- (A) IN GENERAL.—Not later than September 1, 2022, the Secretary shall establish a comprehensive physical property database of materials for use in solar energy technologies, which shall identify the type, quantity, country of origin, source, significant uses, and physical properties of materials used in solar energy technologies.
- (B) COORDINATION.—In establishing the database described in subparagraph (A), the Secretary shall coordinate with—
- (i) the Director of the National Institute of Standards and Technology;
- (ii) the Administrator of the Environmental Protection Agency;
- (iii) the Secretary of the Interior; and
- (iv) relevant industry stakeholders, as determined by the Secretary.
- (6) SOLAR ENERGY TECHNOLOGY PROGRAM STRATEGIC VISION.—
- (A) IN GENERAL.—Not later than September 1, 2022, and every 6 years thereafter, the Secretary shall submit to Congress a report on the strategic vision, progress, goals, and targets of the program, including assessments of solar energy markets and manufacturing.
- (B) PREPARATION.—The Secretary shall coordinate the preparation of the report under subparagraph (A) with—
 - (i) existing peer review processes;
- (ii) studies conducted by the National Laboratories: and
- (iii) the multiyear program planning required under section 994 of the Energy Policy Act of 2005 (42 U.S.C. 16358).
- (7) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the program \$270,000,000 for each of fiscal years 2021 through 2025.
 - (c) Conforming Amendments.—
- (1) The Solar Energy Research, Development, and Demonstration Act of 1974 (42 U.S.C. 5551 et seq.) is repealed.
- (2) Section 6(b)(3) of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5905(b)(3)) is amended—
- (A) by striking subparagraph (L); and
- (B) by redesignating subparagraphs (M) through (S) as subparagraphs (L) through (R), respectively.
- (3) The Solar Photovoltaic Energy Research, Development, and Demonstration Act of 1978 (42 U.S.C. 5581 et seq.) is repealed.
- (4) Section 4 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12003) is amended—
- (A) in the section heading, by striking "PHOTOVOLTAICS, AND SOLAR THERMAL" and inserting "ALCOHOL FROM BIOMASS AND OTHER TECHNOLOGY":
 - (B) in subsection (a)—
- (i) in the matter preceding paragraph (1) (as redesignated by section 1204(c)(1)(B)(iii)), by striking "photovoltaics, and solar thermal energy" and inserting "alcohol from biomass and other energy technology";
- (ii) by striking paragraphs (1) and (2) (as redesignated by section 1204(c)(1)(B)(iii)); and (iii) by redesignating paragraphs (3) and (4) (as redesignated by section 1204(c)(1)(B)(iii)) as paragraphs (1) and (2), respectively; and
- (C) in subsection (c)—
- (i) in the matter preceding paragraph (1), by striking "the Photovoltaic Energy Systems Program, the Solar Thermal Energy Systems Program.":
 - (ii) in paragraph (1)—
 - (I) by striking subparagraph (A); and
- (II) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively; and
 - (iii) in paragraph (2)—
 - (I) by striking subparagraph (A); and

- (II) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively.
- (5) Section 931 of the Energy Policy Act of 2005 (42 U.S.C. 16231) is amended—
 - (A) in subsection (a)(2)-
 - (i) by striking subparagraph (A); and
- (ii) by redesignating subparagraphs (B) through (D) (as redesignated by section 1204(c)(2)(B)) as subparagraphs (A) through (C), respectively;
 - (B) by striking subsection (d); and
- (C) by redesignating subsections (e) through (g) as subsections (d) through (f), respectively.
- (6)(A) Sections 606 and 607 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17174, 17175) are repealed.
- (B) The table of contents in section 1(b) of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1495) is amended by striking the items relating to sections 606 and 607.
- (d) SAVINGS PROVISION.—The repeal of the Solar Energy Research, Development, and Demonstration Act of 1974 (42 U.S.C. 5551 et seq.) under subsection (c)(1) shall not affect the authority of the Secretary to conduct research and development on solar energy.

Subtitle C—Energy Storage SEC. 1301. BETTER ENERGY STORAGE TECHNOLOGY.

- (a) DEFINITIONS.—In this section:
- (1) ENERGY STORAGE SYSTEM.—The term "energy storage system" means any system, equipment, facility, or technology that—
- (A) is capable of absorbing or converting energy, storing the energy for a period of time, and dispatching the energy; and
- (B)(i) uses mechanical, electrochemical, thermal, electrolysis, or other processes to convert and store electric energy that was generated at an earlier time for use at a later time; or
- (ii) stores energy in an electric, thermal, or gaseous state for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity or other fuel sources at that later time, such as a grid-enabled water heater.
- (2) PROGRAM.—The term "program" means the Energy Storage System Research, Development, and Deployment Program established under subsection (b)(1).
- (b) ENERGY STORAGE SYSTEM RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM.—
- (1) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a program, to be known as the "Energy Storage System Research, Development, and Deployment Program"
- (2) INITIAL PROGRAM OBJECTIVES.—The program shall focus on research, development, and deployment of—
- (A) energy storage systems designed to further the development of technologies—
- (i) for large-scale commercial deployment; (ii) for deployment at cost targets estab-
- (ii) for deployment at cost targets established by the Secretary;
- (iii) for hourly and subhourly durations required to provide reliability services to the grid;
 - (iv) for daily durations, which have—
- (I) the capacity to discharge energy for a minimum of 6 hours; and
- (II) a system lifetime of at least 20 years under regular operation;
- (v) for weekly or monthly durations, which have— $\,$
- (I) the capacity to discharge energy for 10 to 100 hours, at a minimum; and
- (II) a system lifetime of at least 20 years under regular operation; and
- (vi) for seasonal durations, which have—
- (I) the capability to address seasonal variations in supply and demand; and

- (II) a system lifetime of at least 20 years under regular operation;
- (B) distributed energy storage technologies and applications, including building-grid integration;
- (C) transportation energy storage technologies and applications, including vehicle-grid integration;
- (D) cost-effective systems and methods for—
- (i) the reclamation, recycling, and disposal of energy storage materials, including lithium, cobalt, nickel, and graphite; and
- (ii) the reuse and repurposing of energy storage system technologies;
- (E) advanced control methods for energy storage systems:
- (F) pumped hydroelectric energy storage systems to advance—
- (i) adoption of innovative technologies, including—
- (I) adjustable-speed, ternary, and other new pumping and generating equipment designs;
 - (II) modular systems;
- (III) closed-loop systems, including mines and quarries; and
- (IV) other critical equipment and materials for pumped hydroelectric energy storage, as determined by the Secretary; and
- (ii) reductions of equipment costs, civil works costs, and construction times for pumped hydroelectric energy storage projects, with the goal of reducing those costs by 50 percent;
- (G) models and tools to demonstrate the benefits of energy storage to—
- (i) power and water supply systems;
- (ii) electric generation portfolio optimization; and
- (iii) expanded deployment of other renewable energy technologies, including in hybrid energy storage systems; and
- (H) energy storage use cases from individual and combination technology applications, including value from various-use cases and energy storage services.
- (3) TESTING AND VALIDATION.—In coordination with 1 or more National Laboratories, the Secretary shall accelerate the development, standardized testing, and validation of energy storage systems under the program by developing testing and evaluation methodologies for—
- (A) storage technologies, controls, and power electronics for energy storage systems under a variety of operating conditions;
- (B) standardized and grid performance testing for energy storage systems, materials, and technologies during each stage of development, beginning with the research stage and ending with the deployment stage;
- (C) reliability, safety, and durability testing under standard and evolving duty cycles; and
- (D) accelerated life testing protocols to predict estimated lifetime metrics with accuracy.
- (4) PERIODIC EVALUATION OF PROGRAM OBJECTIVES.—Not less frequently than once every calendar year, the Secretary shall evaluate and, if necessary, update the program objectives to ensure that the program continues to advance energy storage systems toward widespread commercial deployment by lowering the costs and increasing the duration of energy storage resources.
- (5) ENERGY STORAGE STRATEGIC PLAN.—
- (A) IN GENERAL.—The Secretary shall develop a 10-year strategic plan for the program, and update the plan, in accordance with this paragraph.
- (B) CONTENTS.—The strategic plan developed under subparagraph (A) shall— $\,$
- (i) be coordinated with and integrated across other relevant offices in the Department;

- (ii) to the extent practicable, include metrics that can be used to evaluate storage technologies:
- (iii) identify Department programs that-
- (I) support the research and development activities described in paragraph (2) and the demonstration projects under subsection (c); and
- (II)(aa) do not support the activities or projects described in subclause (I); but
- (bb) are important to the development of energy storage systems and the mission of the Department, as determined by the Secretary;
 - (iv) include expected timelines for-
- (I) the accomplishment of relevant objectives under current programs of the Department relating to energy storage systems; and
- (II) the commencement of any new initiatives within the Department relating to energy storage systems to accomplish those objectives; and
- (v) incorporate relevant activities described in the Grid Modernization Initiative Multi-Year Program Plan.
- (C) SUBMISSION TO CONGRESS.—Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce and Science, Space, and Technology of the House of Representatives the strategic plan developed under subparagraph (A).
 - (D) UPDATES TO PLAN.—The Secretary—
- (i) shall annually review the strategic plan developed under subparagraph (A); and
- (ii) may periodically revise the strategic plan as appropriate.
- (6) LEVERAGING OF RESOURCES.—The program may be led by a specific office of the Department, but shall be cross-cutting in nature, so that in carrying out activities under the program, the Secretary (or a designee of the Secretary charged with leading the program) shall leverage existing Federal resources, including, at a minimum, the expertise and resources of—
- (A) the Office of Electricity Delivery and Energy Reliability;
- (B) the Office of Energy Efficiency and Renewable Energy, including the Water Power Technologies Office; and
 - (C) the Office of Science, including—
- (i) the Basic Energy Sciences Program;
- (ii) the Advanced Scientific Computing Research Program;
- (iii) the Biological and Environmental Research Program; and
- (D) the Electricity Storage Research Initiative established under section 975 of the Energy Policy Act of 2005 (42 U.S.C. 16315).
- (7) PROTECTING PRIVACY AND SECURITY.—In carrying out this subsection, the Secretary shall identify, incorporate, and follow best practices for protecting the privacy of individuals and businesses and the respective sensitive data of the individuals and businesses, including by managing privacy risk and implementing the Fair Information Practice Principles of the Federal Trade Commission for the collection, use, disclosure, and retention of individual electric consumer information in accordance with the Office of Management and Budget Circular A-130 (or successor circulars).
- (c) ENERGY STORAGE DEMONSTRATION PROJECTS; PILOT GRANT PROGRAM.—
- (1) DEMONSTRATION PROJECTS.—Not later than September 30, 2023, the Secretary shall, to the maximum extent practicable, enter into agreements to carry out not fewer than 5 energy storage system demonstration projects, including at least 1 energy storage system demonstration project designed to

- further the development of technologies described in clause (v) or (vi) of subsection (b)(2)(A).
- (2) ENERGY STORAGE PILOT GRANT PROGRAM.—
- (A) DEFINITION OF ELIGIBLE ENTITY.—In this paragraph, the term "eligible entity" means—
- (i) a State energy office (as defined in section 124(a) of the Energy Policy Act of 2005 (42 U.S.C. 15821(a)));
- (ii) an Indian tribe (as defined in section 4 of the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4103).
- (iii) a tribal organization (as defined in section 3765 of title 38, United States Code);
- (iv) an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)):
 - (v) an electric utility, including-
 - (I) an electric cooperative;
- (II) a political subdivision of a State, such as a municipally owned electric utility, or any agency, authority, corporation, or instrumentality of a State political subdivision; and
- (III) an investor-owned utility; and
- (vi) a private energy storage company.
- (B) ESTABLISHMENT.—The Secretary shall establish a competitive grant program under which the Secretary shall award grants to eligible entities to carry out demonstration projects for pilot energy storage systems.
- (C) SELECTION REQUIREMENTS.—In selecting eligible entities to receive a grant under subparagraph (B), the Secretary shall, to the maximum extent practicable—
- (i) ensure regional diversity among eligible entities awarded grants, including ensuring participation of eligible entities that are rural States and States with high energy costs:
- (ii) ensure that grants are awarded for demonstration projects that—
- (I) expand on the existing technology demonstration programs of the Department:
- (II) are designed to achieve 1 or more of the objectives described in subparagraph (D); and
- (III) inject or withdraw energy from the bulk power system, electric distribution system, building energy system, or microgrid (grid-connected or islanded mode) where the project is located: and
- (iii) give consideration to proposals from eligible entities for securing energy storage through competitive procurement or contract for service.
- (D) OBJECTIVES.—Each demonstration project carried out by a grant awarded under subparagraph (B) shall have 1 or more of the following objectives:
- (i) To improve the security of critical infrastructure and emergency response systems.
- (ii) To improve the reliability of transmission and distribution systems, particularly in rural areas, including high-energy-cost rural areas.
- (iii) To optimize transmission or distribution system operation and power quality to defer or avoid costs of replacing or upgrading electric grid infrastructure, including transformers and substations.
- (iv) To supply energy at peak periods of demand on the electric grid or during periods of significant variation of electric grid supply.
- (v) To reduce peak loads of homes and businesses.
- (vi) To improve and advance power conversion systems.
- (vii) To provide ancillary services for grid stability and management.
- (viii) To integrate renewable energy resource production.

- (ix) To increase the feasibility of microgrids (grid-connected or islanded mode).
- (x) To enable the use of stored energy in forms other than electricity to support the natural gas system and other industrial processes.
- (xi) To integrate fast charging of electric vehicles.
- (xii) To improve energy efficiency.
- (3) REPORTS.—Not less frequently than once every 2 years for the duration of the programs under paragraphs (1) and (2), the Secretary shall submit to Congress and make publicly available a report describing the performance of those programs.
- (4) NO PROJECT OWNERSHIP INTEREST.—The Federal Government shall not hold any equity or other ownership interest in any energy storage system that is part of a project under this subsection unless the holding is agreed to by each participant of the project.
- (d) Long-duration Demonstration Initiative and Joint Program.—
 - (1) DEFINITIONS.—In this subsection:
- (A) DIRECTOR OF ARPA-E.—The term "Director of ARPA-E" has the meaning given the term in section 5012(a) of the America COMPETES Act (42 U.S.C. 16538(a)).
- (B) DIRECTOR OF ESTCP.—The term "Director of ESTCP" means the Secretary of Defense, acting through the Director of the Environmental Security Technology Certification Program of the Department of Defense.
- (C) INITIATIVE.—The term "Initiative" means the demonstration initiative established under paragraph (2).
- (D) JOINT PROGRAM.—The term "Joint Program" means the joint program established under paragraph (4).
- (E) SECRETARY.—The term "Secretary" means the Secretary, acting through the Director of ARPA-E.
- (2) ESTABLISHMENT OF INITIATIVE.—Not later than 180 days after the date of enactment of this Act, the Secretary shall establish a demonstration initiative composed of demonstration projects focused on the development of long-duration energy storage technologies.
- (3) SELECTION OF PROJECTS.—To the maximum extent practicable, in selecting demonstration projects to participate in the Initiative, the Secretary shall—
 - (A) ensure a range of technology types;
- (B) ensure regional diversity among projects; and
- (C) consider bulk power level, distribution power level, behind-the-meter, microgrid (grid-connected or islanded mode), and offgrid applications.
- (4) JOINT PROGRAM.—
- (A) ESTABLISHMENT.—As part of the Initiative, the Secretary, in consultation with the Director of ESTCP, shall establish within the Department a joint program to carry out projects—
- (i) to demonstrate promising long-duration energy storage technologies at different scales; and $\,$
- (ii) to help new, innovative long-duration energy storage technologies become commercially viable.
- (B) MEMORANDUM OF UNDERSTANDING.—Not later than 200 days after the date of enactment of this Act, the Secretary shall enter into a memorandum of understanding with the Director of ESTCP to administer the Joint Program.
- (C) INFRASTRUCTURE.—In carrying out the Joint Program, the Secretary and the Director of ESTCP shall—
- (i) use existing test-bed infrastructure at—
- (I) Department facilities; and
- (II) Department of Defense installations; and

- (ii) develop new infrastructure for identified projects, if appropriate.
- (D) GOALS AND METRICS.—The Secretary and the Director of ESTCP shall develop goals and metrics for technological progress under the Joint Program consistent with energy resilience and energy security policies.
- (E) SELECTION OF PROJECTS.—
- (i) IN GENERAL.—To the maximum extent practicable, in selecting projects to participate in the Joint Program, the Secretary and the Director of ESTCP shall—
- (I) ensure that projects are carried out under conditions that represent a variety of environments with different physical conditions and market constraints; and
 - (II) ensure an appropriate balance of-
 - (aa) larger, higher-cost projects; and
 - (bb) smaller, lower-cost projects.
- (ii) PRIORITY.—In carrying out the Joint Program, the Secretary and the Director of ESTCP shall give priority to demonstration projects that—
- (I) make available to the public project information that will accelerate deployment of long-duration energy storage technologies; and
 - (II) will be carried out in the field.
- (e) TECHNICAL AND PLANNING ASSISTANCE PROGRAM.—
 - (1) DEFINITIONS.—In this subsection:
- (A) ELIGIBLE ENTITY.—The term "eligible entity" means—
 - (i) an electric cooperative:
- (ii) a political subdivision of a State, such as a municipally owned electric utility, or any agency, authority, corporation, or instrumentality of a State political subdivision:
- (iii) a not-for-profit entity that is in a partnership with not less than 6 entities described in clause (i) or (ii); and
 - (iv) an investor-owned utility.
- (B) PROGRAM.—The term "program" means the technical and planning assistance program established under paragraph (2)(A).
 - (2) Establishment.—
- (A) IN GENERAL.—The Secretary shall establish a technical and planning assistance program to assist eligible entities in identifying, evaluating, planning, designing, and developing processes to procure energy storage systems.
- (B) ASSISTANCE AND GRANTS.—Under the program, the Secretary shall—
- (i) provide technical and planning assistance, including disseminating information, directly to eligible entities; and
- (ii) award grants to eligible entities to contract to obtain technical and planning assistance from outside experts.
- (C) Focus.—In carrying out the program, the Secretary shall focus on energy storage system projects that have the greatest potential for—
- (i) strengthening the reliability and resiliency of energy infrastructure;
- (ii) reducing the cost of energy storage systems;
- (iii) improving the feasibility of microgrids (grid-connected or islanded mode), particularly in rural areas, including high energy cost rural areas;
 - (iv) reducing consumer electricity costs; or
 - (v) maximizing local job creation.
 - (3) TECHNICAL AND PLANNING ASSISTANCE.-
- (A) IN GENERAL.—Technical and planning assistance provided under the program shall include assistance with 1 or more of the following activities relating to energy storage systems:
- (i) Identification of opportunities to use energy storage systems.
- (ii) Feasibility studies to assess the potential for development of new energy storage systems or improvement of existing energy storage systems.

- (iii) Assessment of technical and economic characteristics, including a cost-benefit analysis.
 - (iv) Utility interconnection.
 - (v) Permitting and siting issues.
- (vi) Business planning and financial analvsis.
 - (vii) Engineering design.
 - (viii) Resource adequacy planning.
 - (ix) Resilience planning and valuation.
- (B) EXCLUSION.—Technical and planning assistance provided under the program shall not be used to pay any person for influencing or attempting to influence an officer or employee of any Federal, State, or local agency, a Member of Congress, an employee of a Member of Congress, a State or local legislative body, or an employee of a State or local legislative body.
- (4) INFORMATION DISSEMINATION.—The information disseminated under paragraph (2)(B)(i) shall include—
- (A) information relating to the topics described in paragraph (3)(A), including case studies of successful examples;
- (B) computational tools or software for assessment, design, and operation and maintenance of energy storage systems;
- (C) public databases that track existing and planned energy storage systems;
- (D) best practices for the utility and grid operator business processes associated with the topics described in paragraph (3)(A); and
- (E) relevant State policies or regulations associated with the topics described in paragraph (3)(A).
 - (5) Applications.—
- (A) IN GENERAL.—The Secretary shall seek applications for the program—
- (i) on a competitive, merit-reviewed basis; and
- (ii) on a periodic basis, but not less frequently than once every 12 months.
- (B) APPLICATION.—An eligible entity desiring to apply for the program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require, including whether the eligible entity is applying for—
- (i) direct technical or planning assistance under paragraph (2)(B)(i); or
- (ii) a grant under paragraph (2)(B)(ii).
- (C) PRIORITIES.—In selecting eligible entities for technical and planning assistance under the program, the Secretary shall give priority to eligible entities described in clauses (i) and (ii) of paragraph (1)(A).
- (6) REPORTS.—The Secretary shall submit to Congress and make available to the public—
- (A) not less frequently than once every 2 years, a report describing the performance of the program, including a synthesis and analysis of any information the Secretary requires grant recipients to provide to the Secretary as a condition of receiving a grant; and
- (B) on termination of the program, an assessment of the success of, and education provided by, the measures carried out by eligible entities under the program.
- (7) COST-SHARING.—Activities under this subsection shall be subject to the cost-sharing requirements under section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).
- (f) ENERGY STORAGE MATERIALS RECYCLING PRIZE COMPETITION.—Section 1008 of the Energy Policy Act of 2005 (42 U.S.C. 16396) is amended by adding at the end the following:
- "(g) ENERGY STORAGE MATERIALS RECY-CLING PRIZE COMPETITION.—
- "(1) DEFINITION OF CRITICAL ENERGY STORAGE MATERIALS.—In this subsection, the term 'critical energy storage materials' includes—
 - "(A) lithium;
- "(B) cobalt;
- "(C) nickel;
- "(D) graphite; and

- "(E) any other material determined by the Secretary to be critical to the continued growing supply of energy storage resources.
 - "(2) PRIZE AUTHORITY.—
- "(A) IN GENERAL.—As part of the program established under subsection (a), the Secretary shall establish an award program, to be known as the 'Energy Storage Materials Recycling Prize Competition' (referred to in this subsection as the 'program'), under which the Secretary shall carry out prize competitions and make awards to advance the recycling of critical energy storage materials.
- "(B) FREQUENCY.—To the maximum extent practicable, the Secretary shall carry out a competition under the program not less frequently than once every calendar year.
 - "(3) ELIGIBILITY.—
- "(A) IN GENERAL.—To be eligible to win a prize under the program, an individual or entity—
- "(i) shall have complied with the requirements of the competition as described in the announcement for that competition published in the Federal Register by the Secretary under paragraph (6);
- "(ii) in the case of a private entity, shall be incorporated in the United States and maintain a primary place of business in the United States;
- "(iii) in the case of an individual, whether participating singly or in a group, shall be a citizen of, or an alien lawfully admitted for permanent residence in, the United States.
- "(B) EXCLUSIONS.—The following entities and individuals shall not be eligible to win a prize under the program:
 - "(i) A Federal entity
- "(ii) A Federal employee (including an employee of a National Laboratory) acting within the scope of employment.
- "(4) AWARDS.—In carrying out the program, the Secretary shall award cash prizes, in amounts to be determined by the Secretary, to each individual or entity selected through a competitive process to develop advanced methods or technologies to recycle critical energy storage materials from energy storage systems
- "(5) CRITERIA.—
- "(A) IN GENERAL.—The Secretary shall establish objective, merit-based criteria for awarding the prizes in each competition carried out under the program.
- "(B) REQUIREMENTS.—The criteria established under subparagraph (A) shall prioritize advancements in methods or technologies that present the greatest potential for large-scale commercial deployment.
- "(C) CONSULTATION.—In establishing criteria under subparagraph (A), the Secretary shall consult with appropriate members of private industry involved in the commercial deployment of energy storage systems.
- ``(6) ADVERTISING AND SOLICITATION OF COMPETITORS.—
- "(A) IN GENERAL.—The Secretary shall announce each prize competition under the program by publishing a notice in the Federal Register.
- "(B) REQUIREMENTS.—Each notice published under subparagraph (A) shall describe the essential elements of the competition, such as—
- "(i) the subject of the competition;
- "(ii) the duration of the competition;
- "(iii) the eligibility requirements for participation in the competition;
- "(iv) the process for participants to register for the competition;
- "(v) the amount of the prize; and
- "(vi) the criteria for awarding the prize.
- "(7) JUDGES.-
- "(A) IN GENERAL.—For each prize competition under the program, the Secretary shall assemble a panel of qualified judges to select the winner or winners of the competition on

- the basis of the criteria established under paragraph (5).
- "(B) SELECTION.—The judges for each competition shall include appropriate members of private industry involved in the commercial deployment of energy storage systems.
- "(C) CONFLICTS.—An individual may not serve as a judge in a prize competition under the program if the individual, the spouse of the individual, any child of the individual, or any other member of the household of the individual—
- "(i) has a personal or financial interest in, or is an employee, officer, director, or agent of, any entity that is a registered participant in the prize competition for which the individual will serve as a judge; or
- "(ii) has a familial or financial relationship with a registered participant in the prize competition for which the individual will serve as a judge.
- "(8) REPORT TO CONGRESS.—Not later than 60 days after the date on which the first prize is awarded under the program, and annually thereafter, the Secretary shall submit to Congress a report that—
 - "(A) identifies each award recipient;
- "(B) describes the advanced methods or technologies developed by each award recipient; and
- "(C) specifies actions being taken by the Department toward commercial application of all methods or technologies with respect to which a prize has been awarded under the program.
- "(9) ANTI-DEFICIENCY ACT.—The Secretary shall carry out the program in accordance with section 1341 of title 31, United States Code (commonly referred to as the 'Anti-Deficiency Act').
- "(10) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this subsection \$10,000,000 for each of fiscal years 2020 through 2024, to remain available until expended."
- (g) REGULATORY ACTIONS TO ENCOURAGE ENERGY STORAGE DEPLOYMENT.—
 - (1) DEFINITIONS.—In this subsection:
- (A) COMMISSION.—The term "Commission" means the Federal Energy Regulatory Commission.
- (B) ELECTRIC STORAGE RESOURCE.—The term "electric storage resource" means a resource capable of receiving electric energy from the grid and storing that electric energy for later injection back into the grid.
 - (2) REGULATORY ACTION.—
- (A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Commission shall issue a regulation to identify the eligibility of, and process for, electric storage resources—
- (i) to receive cost recovery through Commission-regulated rates for the transmission of electric energy in interstate commerce; and
- (ii) that receive cost recovery under clause (i) to receive compensation for other services (such as the sale of energy, capacity, or ancillary services) without regard to whether those services are provided concurrently with the transmission service described in clause (i).
- (B) Prohibition of duplicate recovery.—Any regulation issued under subparagraph (A) shall preclude the receipt of unjust and unreasonable double recovery for electric storage resources providing services described in clauses (i) and (ii) of that subparagraph.
- (3) ELECTRIC STORAGE RESOURCES TECHNICAL CONFERENCE.—
- (A) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Commission shall convene a technical conference on the potential for electric storage resources to improve the operation of electric systems.

- (B) REQUIREMENTS.—The technical conference under subparagraph (A) shall—
- (i) identify opportunities for further consideration of electric storage resources in regional and interregional transmission planning processes within the jurisdiction of the Commission:
- (ii) identify all energy, capacity, and ancillary service products, market designs, or rules that—
- (I) are within the jurisdiction of the Commission; and
- (II) enable and compensate for the use of electric storage resources that improve the operation of electric systems;
- (iii) examine additional products, market designs, or rules that would enable and compensate for the use of electric storage resources for improving the operation of electric systems; and
- (iv) examine the functional value of electric storage resources at the transmission and distribution system interface for purposes of providing electric system reliability.
- (h) COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate the activities under this section (including activities conducted pursuant to the amendments made by this section) among the offices and employees of the Department, other Federal agencies, and other relevant entities—
 - (1) to ensure appropriate collaboration; and
- (2) to avoid unnecessary duplication of those activities.
- (i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated—
- (1) to carry out subsection (b), \$100,000,000 for each of fiscal years 2021 through 2025, to
- remain available until expended;
 (2) to carry out subsection (c), \$100,000,000 for each of fiscal years 2021 through 2025, to remain available until expended;
- (3) to carry out subsection (d), \$50,000,000 for each of fiscal years 2021 through 2025, to remain available until expended; and
- (4) to carry out subsection (e), \$20,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

SEC. 1302. BUREAU OF RECLAMATION PUMPED STORAGE HYDROPOWER DEVELOPMENT.

- (a) AUTHORITY FOR PUMPED STORAGE HYDROPOWER DEVELOPMENT USING MULTIPLE BUREAU OF RECLAMATION RESERVOIRS.—Section 9(c) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)) is amended—
- (1) in paragraph (1), in the fourth sentence, by striking ", including small conduit hydropower development" and inserting "and reserve to the Secretary the exclusive authority to develop small conduit hydropower using Bureau of Reclamation facilities and pumped storage hydropower exclusively using Bureau of Reclamation reservoirs";
- (2) in paragraph (8), by striking "has been filed with the Federal Energy Regulatory Commission as of the date of the enactment of the Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act" and inserting "was filed with the Federal Energy Regulatory Commission before August 9, 2013, and is still pending".
- (b) LIMITATIONS ON ISSUANCE OF CERTAIN LEASES OF POWER PRIVILEGE.—
 - (1) DEFINITIONS.—In this subsection:
- (A) COMMISSION.—The term "Commission" means the Federal Energy Regulatory Commission
- (B) DIRECTOR.—The term "Director" means the Director of the Office of Hearings and Appeals.
- (C) OFFICE OF HEARINGS AND APPEALS.—The term "Office of Hearings and Appeals" means the Office of Hearings and Appeals of the Department of the Interior.

- (D) PARTY.—The term "party", with respect to a study plan agreement, means each of the following parties to the study plan agreement:
 - (i) The proposed lessee.
- (ii) The Tribes.
- (E) PROJECT.—The term "project" means a proposed pumped storage facility that—
- (i) would use multiple Bureau of Reclamation reservoirs; and
- (ii) as of June 1, 2017, was subject to a preliminary permit issued by the Commission pursuant to section 4(f) of the Federal Power Act $(16~\rm U.S.C.~797(f))$.
- (F) PROPOSED LESSEE.—The term "proposed lessee" means the proposed lessee of a project.
- (G) SECRETARY.—The term "Secretary" means the Secretary of the Interior.
- (H) STUDY PLAN.—The term "study plan" means the plan described in paragraph (4)(A).
- (I) STUDY PLAN AGREEMENT.—The term "study plan agreement" means an agreement entered into under paragraph (2)(A) and described in paragraph (3).
- (J) TRIBES.—The term "Tribes" means—
- (i) the Confederated Tribes of the Colville Reservation; and
- (ii) the Spokane Tribe of Indians of the Spokane Reservation.
- (2) REQUIREMENT FOR ISSUANCE OF LEASES OF POWER PRIVILEGE.—The Secretary shall not issue a lease of power privilege pursuant to section 9(c)(1) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)(1)) (as amended by subsection (a)) for a project unless—
- (A) the proposed lessee and the Tribes have entered into a study plan agreement; or
- (B) the Secretary or the Director, as applicable, makes a final determination for—
- (i) a study plan agreement under paragraph (3)(B); or
 - (ii) a study plan under paragraph (4).
- (3) STUDY PLAN AGREEMENT REQUIRE-MENTS.—
- (A) IN GENERAL.—A study plan agreement shall—
- (i) establish the deadlines for the proposed lessee to formally respond in writing to comments and study requests about the project previously submitted to the Commission:
- (ii) allow for the parties to submit additional comments and study requests if any aspect of the project, as proposed, differs from an aspect of the project, as described in a preapplication document provided to the Commission:
- (iii) except as expressly agreed to by the parties or as provided in subparagraph (B) or paragraph (4), require that the proposed lessee conduct each study described in—
- (I) a study request about the project previously submitted to the Commission; or
- (II) any additional study request submitted in accordance with the study plan agreement:
- (iv) require that the proposed lessee study any potential adverse economic effects of the project on the Tribes, including effects on—
- (I) annual payments to the Confederated Tribes of the Colville Reservation under section 5(b) of the Confederated Tribes of the Colville Reservation Grand Coulee Dam Settlement Act (Public Law 103-436; 108 Stat. 4579); and
- (II) annual payments to the Spokane Tribe of Indians of the Spokane Reservation authorized after the date of enactment of this Act, the amount of which derives from the annual payments described in subclause (I);
- (v) establish a protocol for communication and consultation between the parties;
- (vi) provide mechanisms for resolving disputes between the parties regarding implementation and enforcement of the study plan agreement; and
- (vii) contain other provisions determined to be appropriate by the parties.

- (B) DISPUTES.—
- (i) IN GENERAL.—If the parties cannot agree to the terms of a study plan agreement or implementation of those terms, the parties shall submit to the Director, for final determination on the terms or implementation of the study plan agreement, notice of the dispute, consistent with subparagraph (A)(vi), to the extent the parties have agreed to a study plan agreement.
- (ii) INCLUSION.—A dispute covered by clause (i) may include the view of a proposed lessee that an additional study request submitted in accordance with subparagraph (A)(ii) is not reasonably calculated to assist the Secretary in evaluating the potential impacts of the project.
- (iii) TIMING.—The Director shall issue a determination regarding a dispute under clause (i) not later than 120 days after the date on which the Director receives notice of the dispute under that clause.
 - (4) STUDY PLAN.—
- (A) IN GENERAL.—The proposed lessee shall submit to the Secretary for approval a study plan that details the proposed methodology for performing each of the studies—
- (i) identified in the study plan agreement of the proposed lessee; or
- (ii) determined by the Director in a final determination regarding a dispute under paragraph (3)(B).
- (B) INITIAL DETERMINATION.—Not later than 60 days after the date on which the Secretary receives the study plan under subparagraph (A), the Secretary shall make an initial determination that—
 - (i) approves the study plan;
- (ii) rejects the study plan on the grounds that the study plan—
- (I) lacks sufficient detail on a proposed methodology for a study identified in the study plan agreement; or
- (II) is inconsistent with the study plan agreement; or
- (iii) imposes additional study plan requirements that the Secretary determines are necessary to adequately define the potential effects of the project on—
- (I) the exercise of the paramount hunting, fishing, and boating rights of the Tribes reserved pursuant to the Act of June 29, 1940 (54 Stat. 703, chapter 460; 16 U.S.C. 835d et seq.):
- (II) the annual payments described in subclauses (I) and (II) of paragraph (3)(A)(iv);
- (III) the Columbia Basin project (as defined in section 1 of the Act of May 27, 1937 (50 Stat. 208, chapter 269; 57 Stat. 14, chapter 14; 16 U.S.C. 835)):
- (IV) historic properties and cultural or spiritually significant resources; and
 - (V) the environment.
 - (C) Objections —
- (i) IN GENERAL.—Not later than 30 days after the date on which the Secretary makes an initial determination under subparagraph (B), the Tribes or the proposed lessee may submit to the Director an objection to the initial determination.
- (ii) FINAL DETERMINATION.—Not later than 120 days after the date on which the Director receives an objection under clause (i), the Director shall—
- (I) hold a hearing on the record regarding the objection; and
- (II) make a final determination that establishes the study plan, including a description of studies the proposed lessee is required to perform.
- (D) No objections.—If no objections are submitted by the deadline described in subparagraph (C)(i), the initial determination of the Secretary under subparagraph (B) shall be final.
- (5) CONDITIONS OF LEASE.—

- (A) CONSISTENCY WITH RIGHTS OF TRIBES; PROTECTION, MITIGATION, AND ENHANCEMENT OF FISH AND WILDLIFE.—
- (i) IN GENERAL.—Any lease of power privilege issued by the Secretary for a project under paragraph (2) shall contain conditions—
- (I) to ensure that the project is consistent with, and will not interfere with, the exercise of the paramount hunting, fishing, and boating rights of the Tribes reserved pursuant to the Act of June 29, 1940 (54 Stat. 703, chapter 460; 16 U.S.C. 835d et seq.); and
- (II) to adequately and equitably protect, mitigate damages to, and enhance fish and wildlife, including related spawning grounds and habitat, affected by the development, operation, and management of the project.
- (ii) RECOMMENDATIONS OF THE TRIBES.—The conditions required under clause (i) shall be based on joint recommendations of the Tribes.
- (iii) RESOLVING INCONSISTENCIES.—
- (I) IN GENERAL.—If the Secretary determines that any recommendation of the Tribes under clause (ii) is not reasonably calculated to ensure the project is consistent with clause (i) or is inconsistent with the requirements of the Reclamation Project Act of 1939 (43 U.S.C. 485 et seq.), the Secretary shall attempt to resolve any such inconsistency with the Tribes, giving due weight to the recommendations and expertise of the Tribes.
- (II) PUBLICATION OF FINDINGS.—If, after an attempt to resolve an inconsistency under subclause (I), the Secretary does not adopt in whole or in part a recommendation of the Tribes under clause (ii), the Secretary shall issue each of the following findings, including a statement of the basis for each of the findings:
- (aa) A finding that adoption of the recommendation is inconsistent with the requirements of the Reclamation Project Act of 1939 (43 U.S.C. 485 et seq.).
- (bb) A finding that the conditions selected by the Secretary to be contained in the lease of power privilege under clause (i) comply with the requirements of subclauses (I) and (II) of that clause.
- (B) ANNUAL CHARGES PAYABLE BY LICENSEE.—
- (i) In GENERAL.—Subject to clause (ii), any lease of power privilege issued by the Secretary for a project under paragraph (2) shall contain conditions that require the lessee of the project to make direct payments to the Tribes through reasonable annual charges in an amount that recompenses the Tribes for any adverse economic effect of the project identified in a study performed pursuant to the study plan agreement for the project.
 - (ii) AGREEMENT.-
- (I) IN GENERAL.—The amount of the annual charges described in clause (i) shall be established through agreement between the proposed lessee and the Tribes.
- (II) CONDITION.—The agreement under subclause (I), including any modification of the agreement, shall be deemed to be a condition to the lease of power privilege issued by the Secretary for a project under paragraph (2).
- (iii) DISPUTE RESOLUTION.—
- (I) IN GENERAL.—If the proposed lessee and the Tribes cannot agree to the terms of an agreement under clause (ii)(I), the proposed lessee and the Tribes shall submit notice of the dispute to the Director.
- (II) RESOLUTION.—The Director shall resolve the dispute described in subclause (I) not later than 180 days after the date on which the Director receives notice of the dispute under that subclause.
- (C) ADDITIONAL CONDITIONS.—The Secretary may include in any lease of power privilege issued by the Secretary for a project under paragraph (2) other conditions determined

- appropriate by the Secretary, on the condition that the conditions shall be consistent with the Reclamation Project Act of 1939 (43 U.S.C. 485 et seq.).
- (D) CONSULTATION.—In establishing conditions under this paragraph, the Secretary shall consult with the Tribes.
- (6) DEADLINES.—The Secretary or any officer of the Office of Hearing and Appeals before whom a proceeding is pending under this subsection may extend any deadline or enlarge any timeframe described in this subsection—
- (A) at the discretion of the Secretary or the officer; or
- (B) on a showing of good cause by any party.
- (7) JUDICIAL REVIEW.—Any final action of the Secretary or the Director made pursuant to this subsection shall be subject to judicial review in accordance with chapter 7 of title 5. United States Code.
- (8) EFFECT ON OTHER PROJECTS.—Nothing in this subsection establishes any precedent or is binding on any Bureau of Reclamation lease of power privilege, other than for a project.

Subtitle D—Carbon Capture, Utilization, and Storage

SEC. 1401. FOSSIL ENERGY.

Section 961(a) of the Energy Policy Act of 2005 (42 U.S.C. 16291(a)) is amended—

- (1) in paragraph (6), by inserting ", including technology development to reduce emissions of carbon dioxide and associated emissions of heavy metals within coal combustion residues and gas streams resulting from fossil fuel use and production" before the period at the end; and
- (2) by striking paragraph (7) and inserting the following:
- "(7) Increasing the export of fossil energyrelated equipment, technology, including emissions control technologies, and services from the United States.
- "(8) Developing carbon removal and utilization technologies, products, and methods that result in net reductions in greenhouse gas emissions, including direct air capture and storage, and carbon use and reuse for commercial application.
- "(9) Improving the conversion, use, and storage of carbon dioxide produced from fossil fuels."

SEC. 1402. ESTABLISHMENT OF COAL AND NAT-URAL GAS TECHNOLOGY PROGRAM.

(a) IN GENERAL.—The Energy Policy Act of 2005 is amended by striking section 962 (42 U.S.C. 16292) and inserting the following:

"SEC. 962. COAL AND NATURAL GAS TECH-NOLOGY PROGRAM.

- "(a) DEFINITIONS.—In this section:
- "(1) LARGE-SCALE PILOT PROJECT.—The term 'large-scale pilot project' means a pilot project that—
- "(A) represents the scale of technology development beyond laboratory development and bench scale testing, but not yet advanced to the point of being tested under real operational conditions at commercial scale:
- "(B) represents the scale of technology necessary to gain the operational data needed to understand the technical and performance risks of the technology before the application of that technology at commercial scale or in commercial-scale demonstration; and
 - "(C) is large enough-
 - "(i) to validate scaling factors; and
- "(ii) to demonstrate the interaction between major components so that control philosophies for a new process can be developed and enable the technology to advance from large-scale pilot plant application to commercial-scale demonstration or application.

- "(2) NATURAL GAS.—The term 'natural gas' means any fuel consisting in whole or in part
 - "(A) natural gas;
 - "(B) liquid petroleum gas;
- "(C) synthetic gas derived from petroleum or natural gas liquids;
- "(D) any mixture of natural gas and synthetic gas; or
 - "(E) biomethane.
- ``(3) NATURAL GAS ELECTRIC GENERATION FACILITY.—
- "(A) IN GENERAL.—The term 'natural gas electric generation facility' means a facility that generates electric energy using natural gas as the fuel.
- "(B) INCLUSIONS.—The term 'natural gas electric generation facility' includes a new or existing—
 - "(i) simple cycle plant;
 - "(ii) combined cycle plant;
 - $\lq\lq(iii)$ combined heat and power plant; or
- "(iv) steam methane reformer that produces hydrogen from natural gas for use in the production of electric energy.
- "(4) PROGRAM.—The term 'program' means the program established under subsection (b)(1).
 - "(5) TRANSFORMATIONAL TECHNOLOGY.-
- "(A) IN GENERAL.—The term 'transformational technology' means a power generation technology that represents a significant change in the methods used to convert energy that will enable a step change in performance, efficiency, and cost of electricity as compared to the technology in existence on the date of enactment of the American Energy Innovation Act of 2020.
- "(B) INCLUSIONS.—The term 'transformational technology' includes a broad range of technology improvements, including—
- "(i) thermodynamic improvements in energy conversion and heat transfer, including—
- "(I) advanced combustion systems, including oxygen combustion systems and chemical looping; and
- "(II) the replacement of steam cycles with supercritical carbon dioxide cycles:
- "(ii) improvements in steam or carbon dioxide turbine technology:
- "(iii) improvements in carbon capture, utilization, and storage systems technology;
- "(iv) improvements in small-scale and modular coal-fired technologies with reduced carbon output or carbon capture that can support incremental power generation capacity additions;
- "(v) fuel cell technologies for low-cost, high-efficiency modular power systems;
 - "(vi) advanced gasification systems;
 - "(vii) thermal cycling technologies; and
- "(viii) any other technology the Secretary recognizes as transformational technology.
- "(b) COAL AND NATURAL GAS TECHNOLOGY PROGRAM.—
- "(1) IN GENERAL.—The Secretary shall establish a coal and natural gas technology program to ensure the continued use of the abundant domestic coal and natural gas resources of the United States through the development of transformational technologies that will significantly improve the efficiency, effectiveness, costs, and environmental performance of coal and natural gas use.
- ''(2) REQUIREMENTS.—The program shall include—
- "(A) a research and development program;
- "(B) large-scale pilot projects;
- "(C) demonstration projects, in accordance with paragraph (4); and
- "(D) a front-end engineering and design program.
- "(3) PROGRAM GOALS AND OBJECTIVES.—In consultation with the interested entities described in paragraph (6)(C), the Secretary

shall develop goals and objectives for the program to be applied to the transformational technologies developed within the program, taking into consideration the following:

"(A) Increasing the performance of coal and natural gas electric generation facilities, including by—

"(i) ensuring reliable, low-cost power from new and existing coal and natural gas electric generation facilities;

"(ii) achieving high conversion efficiencies; "(iii) addressing emissions of carbon dioxide through high-efficiency platforms;

"(iv) developing small-scale and modular technologies to support incremental capacity additions and load following generation, in addition to large-scale generation technologies:

"(v) supporting dispatchable operations for new and existing applications of coal and natural gas generation; and

"(vi) accelerating the development of technologies that have transformational energy conversion characteristics.

"(B) Using carbon capture, utilization, and sequestration technologies to decrease the carbon dioxide emissions, and the environmental impact from carbon dioxide emissions, from new and existing coal and natural gas electric generation facilities, including by—

"(i) accelerating the development, deployment, and commercialization of technologies to capture and sequester carbon dioxide emissions from new and existing coal and natural gas electric generation facilities:

"(ii) supporting sites for safe geological storage of large volumes of anthropogenic sources of carbon dioxide and the development of the infrastructure needed to support a carbon dioxide utilization and storage industry:

"(iii) improving the conversion, utilization, and storage of carbon dioxide produced from fossil fuels and other anthropogenic sources of carbon dioxide;

"(iv) lowering greenhouse gas emissions for all fossil fuel production, generation, delivery, and use, to the maximum extent practicable:

"(v) developing carbon utilization technologies, products, and methods, including carbon use and reuse for commercial application:

"(vi) developing net-negative carbon dioxide emissions technologies; and

"(vii) developing technologies for the capture of carbon dioxide produced during the production of hydrogen from natural gas.

"(C) Decreasing the non-carbon dioxide relevant environmental impacts of coal and natural gas production, including by—

"(i) further reducing non-carbon dioxide air emissions; and

"(ii) reducing the use, and managing the discharge, of water in power plant operations.

"(D) Accelerating the development of technologies to capture carbon dioxide emissions from industrial facilities, including—

"(i) nontraditional fuel manufacturing facilities, including ethanol or other biofuel production plants or hydrogen production plants; and

"(ii) energy-intensive manufacturing facilities that produce carbon dioxide as a byproduct of operations.

"(E) Examining methods of converting coal and natural gas to other valuable products and commodities in addition to electricity, including hydrogen.

"(F) Entering into cooperative agreements to carry out and expedite demonstration projects (including pilot projects) to demonstrate the technical and commercial viability of technologies to reduce carbon dioxide emissions released from coal and natural gas electric generation facilities for commercial deployment; and

"(G) Identifying any barriers to the commercial deployment of any technologies under development for the capture of carbon dioxide produced by coal and natural gas electric generation facilities.

"(4) DEMONSTRATION PROJECTS.—

"(A) IN GENERAL.—In carrying out the program, the Secretary shall establish a demonstration program under which the Secretary shall enter into agreements by not later than September 30, 2025, for demonstration projects to demonstrate the construction and operation of not fewer than 5 facilities to capture carbon dioxide from coal and natural gas electric generation facilities.

 $\lq\lq(B)$ Requirement.—Of the demonstration projects carried out under subparagraph (A)-

"(i) not fewer than 2 shall be designed to capture carbon dioxide from a natural gas electric generation facility; and

"(ii) not fewer than 2 shall be designed to capture carbon dioxide from a coal electric generation facility.

"(C) GoALS.—Each demonstration project under the demonstration program shall be designed to further the development, deployment, and commercialization of technologies to capture and sequester carbon dioxide emissions from new and existing coal and natural gas electric generation facilities.

"(D) APPLICATIONS.—

"(i) IN GENERAL.—To be eligible to enter into an agreement with the Secretary for a demonstration project under subparagraph (A), an entity shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

"(ii) REVIEW OF APPLICATIONS.—In reviewing applications submitted under clause (i), the Secretary, to the maximum extent practicable, shall—

"(I) ensure a broad geographic distribution of project sites;

"(II) ensure that a broad selection of electric generation facilities are represented;

"(III) ensure that a broad selection of technologies are represented; and

"(IV) leverage existing public-private partnerships and Federal resources.

"(5) INTRAAGENCY COORDINATION FOR CARBON CAPTURE, UTILIZATION, AND SEQUESTRATION ACTIVITIES.—The carbon capture, utilization, and sequestration activities described in paragraph (3)(B) shall be carried out by the Assistant Secretary for Fossil Energy, in coordination with the heads of other relevant offices of the Department and the National Laboratories.

"(6) CONSULTATIONS REQUIRED.—In carrying out the program, the Secretary shall—

"(A) undertake international collaborations, taking into consideration the recommendations of the National Coal Council and the National Petroleum Council;

"(B) use existing authorities to encourage international cooperation; and

"(C) consult with interested entities, in-

"(i) coal and natural gas producers;

"(ii) industries that use coal and natural gas;

"(iii) organizations that promote coal, advanced coal, and natural gas technologies;

 $\begin{tabular}{ll} ``(iv) environmental organizations;\\ ``(v) organizations representing workers;\\ and \end{tabular}$

"(vi) organizations representing consumers.

"(c) Report.-

"(1) IN GENERAL.—Not later than 18 months after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to Congress a report describing

the program goals and objectives adopted under subsection (b)(3).

"(2) UPDATE.—Not less frequently than once every 2 years after the initial report is submitted under paragraph (1), the Secretary shall submit to Congress a report describing the progress made towards achieving the program goals and objectives adopted under subsection (b)(3).

"(d) Funding.—

"(1) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary to carry out this section, to remain available until expended—

"(A) for activities under the research and development program component described in subsection (b)(2)(A)—

 $\lq\lq(i)$ \$230,000,000 for each of fiscal years 2021 and 2022; and

``(ii) \$150,000,000 for each of fiscal years 2023 through 2025;

"(B) subject to paragraph (2), for activities under the large-scale pilot projects program component described in subsection (b)(2)(B)—

"(i) \$347,000,000 for each of fiscal years 2021 and 2022;
"(ii) \$772,000,000 for each of fiscal years 2023

 $\lq\lq(ii)$ \$272,000,000 for each of fiscal years 2023 and 2024; and

"(iii) \$250,000,000 for fiscal year 2025;

"(C) for activities under the demonstration projects program component described in subsection (b)(2)(C)—

((i) \$100,000,000 for each of fiscal years 2021 and 2022; and

((ii)) \$500,000,000 for each of fiscal years 2023 through 2025; and

"(D) for activities under the front-end engineering and design program described in subsection (b)(2)(D), \$50,000,000 for each of fiscal years 2021 through 2024.

"(2) COST SHARING FOR LARGE-SCALE PILOT PROJECTS.—Activities under subsection (b)(2)(B) shall be subject to the cost-sharing requirements of section 988(b).".

(b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) is amended by striking the item relating to section 962 and inserting the following:

"Sec. 962. Coal and natural gas technology program.".

SEC. 1403. CARBON STORAGE VALIDATION AND TESTING.

(a) IN GENERAL.—Section 963 of the Energy Policy Act of 2005 (42 U.S.C. 16293) is amended—

(1) by striking subsection (d) and inserting the following:

"(g) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary to carry out this section—

'(1) \$105,000,000 for fiscal year 2021;

"(2) \$110,250,000 for fiscal year 2022;

"(3) \$115,763,000 for fiscal year 2023;

"(4) \$121,551,000 for fiscal year 2024; and

"(5) \$127,628,000 for fiscal year 2025.";

(2) in subsection (c)—

 $\left(A\right)$ by striking paragraphs (5) and (6) and inserting the following:

"(f) COST SHARING.—Activities carried out under this section shall be subject to the cost-sharing requirements of section 988."; and

(B) by redesignating paragraph (4) as subsection (e) and indenting appropriately;

(3) in subsection (e) (as so redesignated)—

(A) by redesignating subparagraphs (A) and (B) as paragraphs (1) and (2), respectively, and indenting appropriately; and

(B) by striking "subsection" each place it appears and inserting "section"; and

(4) by striking the section designation and heading and all that follows through the end of subsection (c)(3) and inserting the following:

"SEC. 963. CARBON STORAGE VALIDATION AND TESTING.

"(a) DEFINITIONS.—In this section:

- "(1) LARGE-SCALE CARBON SEQUESTRATION.— The term 'large-scale carbon sequestration' means a scale that—
- $\lq\lq(A)$ demonstrates the ability to inject into geologic formations and sequester carbon dioxide; and
- "(B) has a goal of sequestering not less than 50 million metric tons of carbon dioxide over a 10-year period.
- "(2) PROGRAM.—The term 'program' means the program established under subsection (b)(1).
- "(b) CARBON STORAGE PROGRAM.—
- "(1) IN GENERAL.—The Secretary shall establish a program of research, development, and demonstration for carbon storage.
- "(2) PROGRAM ACTIVITIES.—Activities under the program shall include—
- "(A) in coordination with relevant Federal agencies, developing and maintaining mapping tools and resources that assess the capacity of geologic storage formation in the United States;
- "(B) developing monitoring tools, modeling of geologic formations, and analyses—
 "(i) to predict carbon dioxide containment;
- "(ii) to account for sequestered carbon dioxide in geologic storage sites;
 - "(C) researching-
- "(i) potential environmental, safety, and health impacts in the event of a leak into the atmosphere or to an aquifer; and
- "(ii) any corresponding mitigation actions or responses to limit harmful consequences of such a leak;
- "(D) evaluating the interactions of carbon dioxide with formation solids and fluids, including the propensity of injections to induce seismic activity:
- "(E) assessing and ensuring the safety of operations relating to geologic sequestration of carbon dioxide:
- "(F) determining the fate of carbon dioxide concurrent with and following injection into geologic formations; and
- "(G) supporting cost and business model assessments to examine the economic viability of technologies and systems developed under the program.
- "(3) GEOLOGIC SETTINGS.—In carrying out research activities under this subsection, the Secretary shall consider a variety of candidate onshore and offshore geologic settings, including—
 - "(A) operating oil and gas fields;
 - ``(B) depleted oil and gas fields;
 - "(C) residual oil zones;
- "(D) unconventional reservoirs and rock types;
 - "(E) unmineable coal seams;
- "(F) saline formations in both sedimentary and basaltic geologies;
- "(G) geologic systems that may be used as engineered reservoirs to extract economical quantities of brine from geothermal resources of low permeability or porosity; and
- "(H) geologic systems containing in situ carbon dioxide mineralization formations.
- "(c) LARGE-SCALE CARBON SEQUESTRATION DEMONSTRATION PROGRAM.—
- "(1) IN GENERAL.—The Secretary shall establish a demonstration program under which the Secretary shall provide funding for demonstration projects to collect and validate information on the cost and feasibility of commercial deployment of large-scale carbon sequestration technologies.
- "(2) EXISTING REGIONAL CARBON SEQUESTRA-TION PARTNERSHIPS.—In carrying out paragraph (1), the Secretary may provide additional funding to regional carbon sequestration partnerships that are carrying out or have completed a large-scale carbon sequestration demonstration project under this section (as in effect on the day before the date of enactment of the American Energy

Innovation Act of 2020) for additional work on that project.

- "(3) DEMONSTRATION COMPONENTS.—Each demonstration project carried out under this subsection shall include longitudinal tests involving carbon dioxide injection and monitoring, mitigation, and verification operations.
- "(4) CLEARINGHOUSE.—The National Energy Technology Laboratory shall act as a clearinghouse of shared information and resources for—
- "(A) existing or completed demonstration projects receiving additional funding under paragraph (2); and
- "(B) any new demonstration projects funded under this subsection.
- "(5) REPORT.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that—
- "(A) assesses the progress of all regional carbon sequestration partnerships carrying out a demonstration project under this subsection:
- "(B) identifies the remaining challenges in achieving large-scale carbon sequestration that is reliable and safe for the environment and public health; and
- "(C) creates a roadmap for carbon storage research and development activities of the Department through 2025, with the goal of reducing economic and policy barriers to commercial carbon sequestration.
 - "(d) Integrated Storage.-
- "(1) IN GENERAL.—The Secretary may transition large-scale carbon sequestration demonstration projects under subsection (c) into integrated commercial storage complexes.
- "(2) GOALS AND OBJECTIVES.—The goals and objectives of the Secretary in seeking to transition large-scale carbon sequestration demonstration projects into integrated commercial storage complexes under paragraph (1) shall be—
- "(A) to identify geologic storage sites that are able to accept large volumes of carbon dioxide acceptable for commercial contracts;
- "(B) to understand the technical and commercial viability of carbon dioxide geologic storage sites; and
- "(C) to carry out any other activities necessary to transition the large-scale carbon sequestration demonstration projects under subsection (c) into integrated commercial storage complexes."

 (b) TECHNICAL AMENDMENT.—The table of
- (b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600; 121 Stat. 1708) is amended by striking the item relating to section 963 and inserting the following:
- "Sec. 963. Carbon storage validation and testing.".
- (c) Conforming Amendments.—
- (1) Section 703(a)(3) of the Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007 (42 U.S.C. 17251(a)(3)) is amended, in the first sentence of the matter preceding subparagraph (A), by striking "section 963(c)(3)" and inserting "section 963(c)".
- (2) Section 704 of the Department of Energy Carbon Capture and Sequestration Research, Development, and Demonstration Act of 2007 (42 U.S.C. 17252) is amended, in the first sentence, by striking "section 963(c)(3)" and inserting "section 963(c)".

SEC. 1404. CARBON UTILIZATION PROGRAM.

(a) CARBON UTILIZATION PROGRAM.-

(1) IN GENERAL.—Subtitle F of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16291 et seq.) is amended by adding at the end the following:

"SEC. 969, CARBON UTILIZATION PROGRAM.

- "(a) IN GENERAL.—The Secretary shall establish a program of research, development, and demonstration for carbon utilization—
 - "(1) to assess and monitor-
- "(A) potential changes in lifecycle carbon dioxide and other greenhouse gas emissions;
- "(B) other environmental safety indicators of new technologies, practices, processes, or methods used in enhanced hydrocarbon recovery as part of the activities authorized under section 963;
- "(2) to identify and assess novel uses for carbon, including the conversion of carbon and carbon oxides for commercial and industrial products and other products with potential market value:
- "(3) to identify and assess carbon capture technologies for industrial systems; and
- "(4) to identify and assess alternative uses for raw coal and processed coal products in all phases, including products derived from carbon engineering, carbon fiber, and coal conversion methods.
- "(b) DEMONSTRATION PROGRAMS FOR THE PURPOSE OF COMMERCIALIZATION.—
- "(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall establish a 2-year demonstration program in each of the 2 major coal-producing regions of the United States for the purpose of partnering with private institutions in coal mining regions to accelerate the commercial deployment of coalcarbon products.
- "(2) Cost sharing.—Activities under paragraph (1) shall be subject to the cost-sharing requirements of section 988.
- "(c) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary to carry out this section—
 - "(1) \$29,000,000 for fiscal year 2021;
 - "(2) \$30,250,000 for fiscal year 2022;
 - "(3) \$31,562,500 for fiscal year 2023;
 - "(4) \$32,940,625 for fiscal year 2024; and "(5) \$34,387,656 for fiscal year 2025.".
- (2) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) is amended by adding at the end of the items relating to subtitle F of title IX the following:
- "Sec. 969. Carbon utilization program.".
 - (b) STUDY.-
- (1) IN GENERAL.—The Secretary shall enter into an agreement with the National Academies of Sciences, Engineering, and Medicine under which the National Academies of Sciences, Engineering, and Medicine shall conduct a study to assess any barriers and opportunities relating to commercializing carbon, coal-derived carbon, and carbon dioxide in the United States.
- (2) REQUIREMENTS.—The study under paragraph (1) shall—
- (Å) analyze challenges to commercializing carbon dioxide, including—
- (i) expanding carbon dioxide pipeline capacity;
 - (ii) mitigating environmental impacts;
 - (iii) access to capital;
 - (iv) geographic barriers; and
- $\left(v\right)$ regional economic challenges and opportunities;
- (B) identify potential markets, industries, or sectors that may benefit from greater access to commercial carbon dioxide;
- (C) determine the feasibility of, and opportunities for, the commercialization of coalderived carbon products, including for—
 - (i) commercial purposes;
 - (ii) industrial purposes;
 - (iii) defense and military purposes;
- (iv) agricultural purposes, including soil amendments and fertilizers;
- (v) medical and pharmaceutical applications;

- (vi) construction and building applications;
- (vii) energy applications; and
- (viii) production of critical minerals;
- (D) assess—
- (i) the state of infrastructure as of the date of the study: and
- (ii) any necessary updates to infrastructure to allow for the integration of safe and reliable carbon dioxide transportation, use, and storage;
- (E) describe the economic, climate, and environmental impacts of any well-integrated national carbon dioxide pipeline system, including suggestions for policies that could—
- (i) improve the economic impact of the system; and
 - (ii) mitigate impacts of the system:
- (F) assess the global status and progress of chemical and biological carbon utilization technologies in practice as of the date of the study that utilize anthropogenic carbon, including carbon dioxide, carbon monoxide, methane, and biogas, from power generation, biofuels production, and other industrial processes;
- (G) identify emerging technologies and approaches for carbon utilization that show promise for scale-up, demonstration, deployment, and commercialization:
- (H) analyze the factors associated with making carbon utilization technologies viable at a commercial scale, including carbon waste stream availability, economics, market capacity, energy, and lifecycle requirements:
- (I)(i) assess the major technical challenges associated with increasing the commercial viability of carbon reuse technologies; and
- (ii) identify the research and development questions that will address the challenges described in clause (i);
- (J)(i) assess research efforts being carried out as of the date of the study, including basic, applied, engineering, and computational research efforts, that are addressing the challenges described in subparagraph (I)(i); and
- (ii) identify gaps in the research efforts under clause (i);
- (K) develop a comprehensive research agenda that addresses long- and short-term research needs and opportunities; and
- (L)(i) identify appropriate Federal agencies with capabilities to support small business entities; and
- (ii) determine what assistance the Federal agencies identified under clause (i) could provide to small business entities to further the development and commercial deployment of carbon dioxide-based products.
- (3) DEADLINE.—Not later than 180 days after the date of enactment of this Act, the National Academies of Sciences, Engineering, and Medicine shall submit to the Secretary a report describing the results of the study under paragraph (1).

SEC. 1405. CARBON REMOVAL.

(a) IN GENERAL.—Subtitle F of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16291 et seq.) (as amended by section 1404(a)(1)) is amended by adding at the end the following:

"SEC. 969A. CARBON REMOVAL.

- "(a) ESTABLISHMENT.—The Secretary, in coordination with the heads of appropriate Federal agencies, including the Secretary of Agriculture, shall establish a research, development, and demonstration program (referred to in this section as the 'program') to test, validate, or improve technologies and strategies to remove carbon dioxide from the atmosphere on a large scale.
- "(b) INTRAAGENCY COORDINATION.—The Secretary shall ensure that the program includes the coordinated participation of the Office of Fossil Energy, the Office of Science, and the Office of Energy Efficiency and Renewable Energy.

- "(c) Program Activities.—The program may include research, development, and demonstration activities relating to—
- "(1) direct air capture and storage technologies;
- "(2) bioenergy with carbon capture and sequestration;
 - "(3) enhanced geological weathering;
 - "(4) agricultural practices;
- "(5) forest management and afforestation; and
- "(6) planned or managed carbon sinks, including natural and artificial.
- "(d) REQUIREMENTS.—In developing and identifying carbon removal technologies and strategies under the program, the Secretary shall consider—
- "(1) land use changes, including impacts on natural and managed ecosystems;
 - "(2) ocean acidification;
- "(3) net greenhouse gas emissions;
- "(4) commercial viability;
- "(5) potential for near-term impact;
- "(6) potential for carbon reductions on a gigaton scale; and
 - "(7) economic cobenefits.
- ''(e) AIR CAPTURE TECHNOLOGY PRIZE COMPETITION.—
- "(1) DEFINITIONS.—In this subsection:
- "(A) DILUTE MEDIA.—The term 'dilute media' means media in which the concentration of carbon dioxide is less than 1 percent by volume.
- "(B) PRIZE COMPETITION.—The term 'prize competition' means the competitive technology prize competition established under paragraph (2).
- "(2) ESTABLISHMENT.—Not later than 2 years after the date of enactment of this section, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall establish as part of the program a competitive technology prize competition to award prizes for carbon dioxide capture from dilute media.
- "(3) REQUIREMENTS.—In carrying out this subsection, the Secretary, in accordance with section 24 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3719), shall develop requirements for—
 - "(A) the prize competition process; and
- "(B) monitoring and verification procedures for projects selected to receive a prize under the prize competition.
- "(4) ELIGIBLE PROJECTS.—To be eligible to be awarded a prize under the prize competition, a project shall—
- "(A) meet minimum performance standards set by the Secretary:
- "(B) meet minimum levels set by the Secretary for the capture of carbon dioxide from dilute media; and
- $\mbox{``(C)}$ demonstrate in the application of the project for a prize—
- "(i) a design for a promising carbon capture technology that will—
- "(I) be operated on a demonstration scale;
- "(II) have the potential to achieve significant reduction in the level of carbon dioxide in the atmosphere;
- "(ii) a successful bench-scale demonstration of a carbon capture technology; or
- "(iii) an operational carbon capture technology on a commercial scale.
- "(f) DIRECT AIR CAPTURE TEST CENTER.—
- "(1) IN GENERAL.—Not later than 2 years after the date of enactment of this section, the Secretary shall award grants to 1 or more entities for the operation of 1 or more test centers (referred to in this subsection as a 'Center') to provide unique testing capabilities for innovative direct air capture and storage technologies.
 - "(2) PURPOSE.—Each Center shall—
- "(A) advance research, development, demonstration, and commercial application of direct air capture and storage technologies;

- "(B) support large-scale pilot and demonstration projects and test direct air capture and storage technologies;
- "(C) develop front-end engineering design and economic analysis; and
- "(D) maintain a public record of pilot and full-scale plant performance.
 - "(3) SELECTION.-
- "(A) IN GENERAL.—The Secretary shall select entities to receive grants under this subsection according to such criteria as the Secretary may develop.
- "(B) COMPETITIVE BASIS.—The Secretary shall select entities to receive grants under this subsection on a competitive basis.
- "(C) PRIORITY CRITERIA.—In selecting entities to receive grants under this subsection, the Secretary shall prioritize applicants that—
- "(i) have access to existing or planned research facilities for direct air capture and storage technologies;
- "(ii) are institutions of higher education with established expertise in engineering for direct air capture and storage technologies, or partnerships with such institutions of higher education; or
- "(iii) have access to existing research and test facilities for bulk materials design and testing, component design and testing, or professional engineering design.
- "(4) FORMULA FOR AWARDING GRANTS.—The Secretary may develop a formula for awarding grants under this subsection.
 - "(5) SCHEDULE.-
- "(A) IN GENERAL.—Each grant awarded under this subsection shall be for a term of not more than 5 years, subject to the availability of appropriations.
- "(B) RENEWAL.—The Secretary may renew a grant for 1 or more additional 5-year terms, subject to a competitive merit review and the availability of appropriations.
- "(6) TERMINATION.—To the extent otherwise authorized by law, the Secretary may eliminate, and terminate grant funding under this subsection for, a Center during any 5-year term described in paragraph (5) if the Secretary determines that the Center is underperforming.
- "(g) PILOT AND DEMONSTRATION PROJECTS.—In supporting the technology development activities under this section, the Secretary is encouraged to support carbon removal pilot and demonstration projects, including—
- "(1) pilot projects that test direct air capture systems capable of capturing 10 to 100 tonnes of carbon oxides per year to provide data for demonstration-scale projects; and
- "(2) direct air capture demonstration projects capable of capturing greater than 1,000 tonnes of carbon oxides per year.
- "(h) INTRAGENCY COORDINATION.—The direct air capture activities carried out under subsections (c)(1) and (e) shall be carried out in coordination with, and leveraging lessons learned from, the coal and natural gas technology program established under section 962(b)(1)
- "(i) ACCOUNTING.—The Secretary shall collaborate with the Administrator of the Environmental Protection Agency and the heads of other relevant Federal agencies to develop and improve accounting frameworks and tools to accurately measure carbon removal and sequestration methods and technologies across the Federal Government.
- "(j) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary to carry out this section—
- "(1) \$75,000,000 for fiscal year 2021, of which \$15,000,000 shall be used to carry out subsection (e);
 - "(2) \$63,500,000 for fiscal year 2022;
 - "(3) \$66,150,000 for fiscal year 2023;
 - "(4) \$69,458,000 for fiscal year 2024; and
 - "(5) \$72,930,000 for fiscal year 2025."

(b) TECHNICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) (as amended by section 1404(a)(2)) is amended by adding at the end of the items relating to subtitle F of title IX the following:

"Sec. 969A. Carbon removal.".

Subtitle E—Nuclear

SEC. 1501. LIGHT WATER REACTOR SUSTAIN-ABILITY PROGRAM.

Section 952 of the Energy Policy Act of 2005 (42 U.S.C. 16272) is amended by striking subsection (b) and inserting the following:

"(b) LIGHT WATER REACTOR SUSTAINABILITY PROGRAM.—The Secretary shall carry out a light water reactor sustainability program—

"(1) to ensure the achievement of maximum benefits from existing nuclear generation:

"(2) to accommodate the increase in applications for nuclear power plant license renewals expected as of the date of enactment of this subsection;

"(3) to enable the continued operation of existing nuclear power plants through technology development;

"(4) to improve the performance and reduce the operation and maintenance costs of nuclear power plants;

"(5) to promote the use of high-performance computing to simulate nuclear reactor processes;

"(6) to coordinate with other research and development programs of the Office of Nuclear Energy to ensure that developed technologies and capabilities are part of an integrated investment strategy, the overall focus of which is improving the safety, security, reliability, and economics of operating nuclear power plants; and

"(7) to focus on-

"(A) new capabilities relating to nuclear energy research and development;

"(B) enabling technologies beyond individual programs;

"(C) coordinating capabilities among the research and development programs of the Office of Nuclear Energy;

"(D) examining new classes of materials not considered for nuclear applications;

"(E) high-risk research, which could potentially overcome technological limitations; and

"(F) the potential for industry partnerships to develop technologies relating to storage, hydrogen production, high-temperature process heat, and other relevant areas"

SEC. 1502. NUCLEAR ENERGY RESEARCH, DEVEL-OPMENT, AND DEMONSTRATION.

Section 952 of the Energy Policy Act of 2005 (42 U.S.C. 16272) is amended by adding at the end the following:

"(e) ADVANCED REACTOR TECHNOLOGIES DE-VELOPMENT PROGRAM.—

"(1) IN GENERAL.—The Secretary shall carry out a program under which the Secretary shall conduct research relating to the development of innovative nuclear reactor technologies that may offer improved safety, functionality, and affordability.

"(2) REQUIREMENTS.—The program under this subsection shall—

"(A) support efforts to reduce long-term technical barriers for advanced nuclear energy systems; and

"(B) be carried out in consultation with the Nuclear Regulatory Commission to ensure identification of any relevant concerns"

SEC. 1503. ADVANCED FUELS DEVELOPMENT.

Section 953 of the Energy Policy Act of 2005 (42 U.S.C. 16273) is amended—

(1) by redesignating subsections (a) through (d) as paragraphs (1), (3), (4), and (5), respectively, and indenting appropriately;

(2) in paragraph (1) (as so redesignated)—

(A) by striking "this section" and inserting "this subsection";

(B) by striking "minimize environmental" and inserting "improve fuel cycle performance while minimizing the cost and complexity of processing, environmental impacts,"; and

(C) by striking "the Generation IV";

(3) by inserting after paragraph (1) (as so redesignated) the following:

"(2) Considerations.—In carrying out activities under the program, the Secretary shall consider the potential benefits of those activities for civilian nuclear applications, environmental remediation, and national security.";

(4) by inserting after paragraph (5) (as so redesignated) the following:

"(6) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the program \$40,000,000 for each of fiscal years 2021 through 2025.";

(5) by inserting before paragraph (1) (as so redesignated) the following:

"(a) MATERIAL RECOVERY AND WASTE FORM DEVELOPMENT.—"; and

(6) by adding at the end the following:

"(b) ADVANCED FUELS.—

"(1) IN GENERAL.—The Secretary shall carry out a program to conduct research relating to—

``(A) next-generation light water reactor fuels that demonstrate improved—

"(i) performance; and

"(ii) accident tolerance; and

"(B) advanced reactor fuels that demonstrate improved—

"(i) proliferation resistance; and

"(ii) use of resources.

"(2) REQUIREMENTS.—In carrying out the program under this subsection, the Secretary shall—

"(A) focus on the development of accidenttolerant fuel and cladding concepts that are capable of achieving initial commercialization by December 31, 2025:

"(B) conduct studies regarding the means by which those concepts would impact reactor economics, the fuel cycle, operations, safety, and the environment:

"(C) subject to paragraph (3), publish the results of the studies conducted under subparagraph (B); and

"(D) cooperate with institutions of higher education through the Nuclear Energy University and Integrated Research Projects programs of the Department.

"(3) SENSITIVE INFORMATION.—The Secretary shall not publish any information under paragraph (2)(C) that is detrimental to national security, as determined by the Secretary.

"(4) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the program under this subsection \$120,000,000 for each of fiscal years 2021 through 2025.".

SEC. 1504. NUCLEAR SCIENCE AND ENGINEERING SUPPORT.

(a) In General.—Section 954 of the Energy Policy Act of 2005 (42 U.S.C. 16274) is amended— $\,$

(1) in the section heading, by striking "University nuclear" and inserting "Nuclear";

(2) in subsection (b)—

(A) in the matter preceding paragraph (1), by striking "this section" and inserting "this subsection"; and

(B) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E), respectively, and indenting appropriately;

(3) in subsection (c), by redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively, and indenting appropriately;

(4) in subsection (d)—

(A) in the matter preceding paragraph (1), by striking "this section" and inserting "this subsection"; and

(B) by redesignating paragraphs (1) through (4) as subparagraphs (A) through (D), respectively, and indenting appropriately;

(5) in subsection (e), by striking "this section" and inserting "this subsection";

(6) in subsection (f)-

(A) by striking "this section" and inserting "this subsection"; and

(B) by striking "subsection (b)(2)" and inserting "paragraph (2)(B)";

(7) by redesignating subsections (a) through (f) as paragraphs (1), (2), (3), (4), (6), and (7), respectively, and indenting appropriately:

(8) by inserting after paragraph (4) (as so redesignated) the following:

"(5) RADIOLOGICAL FACILITIES MANAGE-MENT.—

"(A) IN GENERAL.—The Secretary shall carry out a program under which the Secretary shall provide project management, technical support, quality engineering and inspection, and nuclear material support to research reactors located at universities.

"(B) AUTHORIZATION OF APPROPRIATIONS.— In addition to any amounts appropriated to carry out the program under this subsection, there is authorized to be appropriated to the Secretary to carry out the program under this paragraph \$15,000,000 for each of fiscal years 2021 through 2025.";

(9) by inserting before paragraph (1) (as so redesignated) the following:

"(a) UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.—"; and

(10) by adding at the end the following:

"(b) NUCLEAR ENERGY APPRENTICESHIP SUB-PROGRAM —

"(1) ESTABLISHMENT.—In carrying out the program under subsection (a), the Secretary shall establish a nuclear energy apprenticeship subprogram under which the Secretary establish competitively shall awarded traineeships and apprenticeships in industries that are represented by skilled labor unions and with universities to provide focused, graduate-level training to meet highly focused needs through a tailored academic graduate program that delivers a curriculum with a rigorous thesis or dissertation research requirement aligned with the critical needs of the Department with respect to mission-driven workforce.

"(2) REQUIREMENTS.—In carrying out the subprogram under this subsection, the Secretary shall—

"(A) encourage appropriate partnerships among National Laboratories, affected universities, and industry; and

"(B) on an annual basis, evaluate the needs of the nuclear energy community to implement traineeships for focused topical areas addressing mission-specific workforce needs.

"(3) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the subprogram under this subsection \$5,000,000 for each of fiscal years 2021 through 2025."

(b) CONFORMING AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 600) is amended by striking the item relating to section 954 and inserting the following:

"Sec. 954. Nuclear science and engineering support.".

SEC. 1505. UNIVERSITY NUCLEAR LEADERSHIP PROGRAM.

Section 313 of the Energy and Water Development and Related Agencies Appropriations Act, 2009 (42 U.S.C. 16274a), is amended to read as follows:

"SEC. 313. UNIVERSITY NUCLEAR LEADERSHIP PROGRAM.

"(a) DEFINITIONS.—In this section:

- "(1) ADVANCED NUCLEAR REACTOR.—The term 'advanced nuclear reactor' means—
- "(A) a nuclear fission reactor, including a prototype plant (as defined in sections 50.2 and 52.1 of title 10, Code of Federal Regulations (or successor regulations)), with significant improvements compared to the most recent generation of fission reactors, including improvements such as—
 - "(i) additional inherent safety features;
 - "(ii) lower waste yields;
 - "(iii) improved fuel performance;
- "(iv) increased tolerance to loss of fuel cooling;
 - "(v) enhanced reliability;
 - "(vi) increased proliferation resistance;
- "(vii) increased thermal efficiency:
- "(viii) reduced consumption of cooling water;
- "(ix) the ability to integrate into electric applications and nonelectric applications:
- "(x) modular sizes to allow for deployment that corresponds with the demand for electricity; or
- "(xi) operational flexibility to respond to changes in demand for electricity and to complement integration with intermittent renewable energy; and
 - "(B) a fusion reactor.
- "(2) INSTITUTION OF HIGHER EDUCATION.— The term 'institution of higher education' has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).
- "(3) PROGRAM.—The term 'Program' means the University Nuclear Leadership Program established under subsection (b).
- "(b) ESTABLISHMENT.—The Secretary of Energy, the Administrator of the National Nuclear Security Administration, and the Chairman of the Nuclear Regulatory Commission shall jointly establish a program, to be known as the 'University Nuclear Leadership Program'.
 - "(c) USE OF FUNDS.—
- "(1) IN GENERAL.—Except as provided in paragraph (2), amounts made available to carry out the Program shall be used to provide financial assistance for scholarships, fellowships, and research and development projects at institutions of higher education in areas relevant to the programmatic mission of the applicable Federal agency providing the financial assistance with respect to research, development, demonstration, and deployment activities for technologies relevant to advanced nuclear reactors, including relevant fuel cycle technologies.
- "(2) EXCEPTION.—Notwithstanding paragraph (1), amounts made available to carry out the Program may be used to provide financial assistance for a scholarship, fellowship, or multiyear research and development project that does not align directly with a programmatic mission of the applicable Federal agency providing the financial assistance, if the activity for which assistance is provided would facilitate the maintenance of the discipline of nuclear science or nuclear engineering.
- "(d) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to carry out the Program for fiscal year 2021 and each fiscal year thereafter—
- "(1) \$30,000,000 to the Secretary of Energy, of which \$15,000,000 shall be for use by the Administrator of the National Nuclear Security Administration; and
- "(2) \$15,000,000 to the Nuclear Regulatory Commission.".

SEC. 1506. VERSATILE, REACTOR-BASED FAST NEUTRON SOURCE.

Section 955(c)(1) of the Energy Policy Act of 2005 (42 U.S.C. 16275(c)(1)) is amended—

(1) in the paragraph heading, by striking "MISSION NEED" and inserting "AUTHORIZATION"; and

(2) in subparagraph (A), by striking "determine the mission need" and inserting "provide".

SEC. 1507. ADVANCED NUCLEAR REACTOR RESEARCH AND DEVELOPMENT GOALS.

(a) IN GENERAL.—Subtitle E of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16271 et seq.) is amended by adding at the end the following:

"SEC. 959A. ADVANCED NUCLEAR REACTOR RE-SEARCH AND DEVELOPMENT GOALS.

- "(a) DEFINITIONS.—In this section:
- "(1) ADVANCED NUCLEAR REACTOR.—The term 'advanced nuclear reactor' means—
- "(A) a nuclear fission reactor, including a prototype plant (as defined in sections 50.2 and 52.1 of title 10, Code of Federal Regulations (or successor regulations)), with significant improvements compared to the most recent generation of fission reactors, including improvements such as—
 - "(i) additional inherent safety features;
 - "(ii) lower waste yields;
- "(iii) improved fuel performance;
- "(iv) increased tolerance to loss of fuel cooling;
 - "(v) enhanced reliability;
- ``(vi) increased proliferation resistance;
- "(vii) increased thermal efficiency;
- "(viii) reduced consumption of cooling water;
- "(ix) the ability to integrate into electric applications and nonelectric applications;
- ``(x) modular sizes to allow for deployment that corresponds with the demand for electricity; or
- "(xi) operational flexibility to respond to changes in demand for electricity and to complement integration with intermittent renewable energy; and
- "(B) a fusion reactor.
- "(2) DEMONSTRATION PROJECT.—The term 'demonstration project' means an advanced nuclear reactor operated in any manner, including as part of the power generation facilities of an electric utility system, for the purpose of demonstrating the suitability for commercial application of the advanced nuclear reactor.
- "(b) PURPOSE.—The purpose of this section is to direct the Secretary, as soon as practicable after the date of enactment of this section, to advance the research and development of domestic advanced, affordable, and clean nuclear energy by—
- "(1) demonstrating different advanced nuclear reactor technologies that could be used by the private sector to produce—
- "(A) emission-free power at a levelized cost of electricity of \$60 per megawatt-hour or less;
- "(B) heat for community heating, industrial purposes, or synthetic fuel production; "(C) remote or off-grid energy supply; or
- "(D) backup or mission-critical power supplies:
- "(2) developing subgoals for nuclear energy research programs that would accomplish the goals of the demonstration projects carried out under subsection (c):
- "(3) identifying research areas that the private sector is unable or unwilling to undertake due to the cost of, or risks associated with the research; and
- "(4) facilitating the access of the private sector—
- "(A) to Federal research facilities and personnel; and
- "(B) to the results of research relating to civil nuclear technology funded by the Federal Government.
 - "(c) DEMONSTRATION PROJECTS.—
- $\lq\lq(1)$ IN GENERAL.—The Secretary shall, to the maximum extent practicable—
- "(A) enter into agreements to complete not fewer than 2 demonstration projects by not later than December 31, 2025; and

- "(B) establish a program to enter into agreements to complete 1 additional operational demonstration project by not later than December 31, 2035.
- "(2) REQUIREMENTS.—In carrying out demonstration projects under paragraph (1), the Secretary shall—
- "(A) include diversity in designs for the advanced nuclear reactors demonstrated under this section, including designs using various—
 - "(i) primary coolants;
 - "(ii) fuel types and compositions; and
 - "(iii) neutron spectra;
 - "(B) seek to ensure that-
- "(i) the long-term cost of electricity or heat for each design to be demonstrated under this subsection is cost-competitive in the applicable market;
- "(ii) the selected projects can meet the deadline established in paragraph (1) to demonstrate first-of-a-kind advanced nuclear reactor technologies, for which additional information shall be considered, including—
- "(I) the technology readiness level of a proposed advanced nuclear reactor technology:
- "(II) the technical abilities and qualifications of teams desiring to demonstrate a proposed advanced nuclear reactor technology; and
- "(III) the capacity to meet cost-share requirements of the Department:
- "(C) ensure that each evaluation of candidate technologies for the demonstration projects is completed through an external review of proposed designs, which review shall—
- "(i) be conducted by a panel that includes not fewer than 1 representative of each of—
 - "(I) an electric utility; and
- "(II) an entity that uses high-temperature process heat for manufacturing or industrial processing, such as a petrochemical company, a manufacturer of metals, or a manufacturer of concrete:
- "(ii) include a review of cost-competitiveness and other value streams, together with the technology readiness level, of each design to be demonstrated under this subsection; and
- "(iii) not be required for a demonstration project that receives no financial assistance from the Department for construction costs;
- "(D) for federally funded demonstration projects, enter into cost-sharing agreements with private sector partners in accordance with section 988 for the conduct of activities relating to the research, development, and demonstration of private-sector advanced nuclear reactor designs under the program:
- "(E) work with private sector partners to identify potential sites, including Department-owned sites, for demonstrations, as appropriate:
- "(F) align specific activities carried out under demonstration projects carried out under this subsection with priorities identified through direct consultations between—
- "(i) the Department;
- "(ii) National Laboratories;
- "(iii) institutions of higher education;
- "(iv) traditional end-users (such as electric utilities);
- "(v) potential end-users of new technologies (such as users of high-temperature process heat for manufacturing processing, including petrochemical companies, manufacturers of metals, or manufacturers of concrete); and
- "(vi) developers of advanced nuclear reactor technology; and
- "(G) seek to ensure that the demonstration projects carried out under paragraph (1) do not cause any delay in a deployment of an advanced reactor by private industry and the Department that is underway as of the date of enactment of this section.

- "(3) ADDITIONAL REQUIREMENTS.—In carrying out demonstration projects under paragraph (1), the Secretary shall-
- "(A) identify candidate technologies that— "(i) are not developed sufficiently for demonstration within the initial required timeframe described in paragraph (1)(A); but

"(ii) could be demonstrated within the timeframe described in paragraph (1)(B);

- "(B) identify technical challenges to the candidate technologies identified in subparagraph (A);
- "(C) support near-term research and development to address the highest-risk technical challenges to the successful demonstration of a selected advanced reactor technology, in accordance with-
- "(i) subparagraph (B); and
- "(ii) the research and development activities under sections 952 and 958;
- "(D) establish such technology advisory working groups as the Secretary determines to be appropriate to advise the Secretary regarding the technical challenges identified under subparagraph (B) and the scope of research and development programs to address the challenges, in accordance with subparagraph (C), to be comprised of-
- "(i) private-sector advanced nuclear reactor technology developers:
- '(ii) technical experts with respect to the relevant technologies at institutions of higher education; and
- "(iii) technical experts at the National Laboratories
 - '(d) GOALS.-
- "(1) IN GENERAL.—The Secretary shall establish goals for research relating to advanced nuclear reactors facilitated by the Department that support the objectives of the program for demonstration projects established under subsection (c).
- "(2) COORDINATION.—In developing the goals under paragraph (1), the Secretary shall coordinate, on an ongoing basis, with members of private industry to advance the demonstration of various designs of advanced nuclear reactors.
- "(3) REQUIREMENTS.—In developing the goals under paragraph (1), the Secretary shall ensure that-
- '(A) research activities facilitated by the Department to meet the goals developed under this subsection are focused on key areas of nuclear research and deployment ranging from basic science to full-design development, safety evaluation, and licensing;
- '(B) research programs designed to meet the goals emphasize-
- '(i) resolving materials challenges relating to extreme environments, including extremely high levels of-
- '(I) radiation fluence:
- '(II) temperature;
- "(III) pressure; and
- '(IV) corrosion: and
- "(ii) qualification of advanced fuels;
- "(C) activities are carried out that address near-term challenges in modeling and simulation to enable accelerated design and licensing;
- "(D) related technologies, such as technologies to manage, reduce, or reuse nuclear waste, are developed;
- "(E) nuclear research infrastructure is maintained or constructed, such as-
- "(i) currently operational research reactors at the National Laboratories and institutions of higher education;
 - "(ii) hot cell research facilities;
 - "(iii) a versatile fast neutron source; and "(iv) a molten salt testing facility;
- "(F) basic knowledge of non-light water coolant physics and chemistry is improved;
- '(G) advanced sensors and control systems are developed; and
- '(H) advanced manufacturing and advanced construction techniques and mate-

- rials are investigated to reduce the cost of advanced nuclear reactors.'
- (b) TABLE OF CONTENTS.—The table of contents of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 594; 132 Stat. 3160) is amended-
- (1) in the item relating to section 917, by striking "Efficiency"
- (2) in the items relating to each of sections 957, 958, and 959 by inserting "Sec." before the item number; and
- (3) by inserting after the item relating to section 959 the following:
- "Sec. 959A. Advanced nuclear reactor research and development goals."

SEC. 1508. NUCLEAR ENERGY STRATEGIC PLAN.

(a) IN GENERAL.—Subtitle E of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16271 et seq.) (as amended by section 1507(a)) is amended by adding at the end the following: "SEC. 959B. NUCLEAR ENERGY STRATEGIC PLAN.

'(a) IN GENERAL.—Not later than 180 days after the date of enactment of this section. the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce and Science, Space, and Technology of the House of Representatives a 10-year strategic plan for the Office of Nuclear Energy of the Department, in accordance with this sec-

(b) Requirements.-

- "(1) COMPONENTS.—The strategic plan under this section shall designate-
- "(A) programs that support the planned accomplishment of-
- "(i) the goals established under section 959A; and
- "(ii) the demonstration programs identified under subsection (c) of that section; and
- "(B) programs that-"(i) do not support the planned accomplishment of demonstration programs, or the
- goals, referred to in subparagraph (A); but "(ii) are important to the mission of the Office of Nuclear Energy, as determined by the Secretary.
- "(2) PROGRAM PLANNING.—In developing the strategic plan under this section, the Secretary shall specify expected timelines for, as applicable-
- "(A) the accomplishment of relevant objectives under current programs of the Department: or
- "(B) the commencement of new programs to accomplish those objectives.
- (c) UPDATES.—Not less frequently than once every 2 years, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce and Science, Space, and Technology of the House of Representatives an updated 10-year strategic plan in accordance with subsection (b), which shall identify, and provide a justification for, any major deviation from a previous strategic plan submitted under this section.
- (b) TABLE OF CONTENTS.—The table of contents of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 594; 132 Stat. 3160) (as amended by section 1507(b)(3)) is amended by inserting after the item relating to section 959A the following:

"Sec. 959B. Nuclear energy strategic plan." SEC. 1509. ADVANCED NUCLEAR FUEL SECURITY PROGRAM.

(a) IN GENERAL.—Subtitle E of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16271 et seq.) (as amended by section 1508(a)) is amended by adding at the end the following: "SEC. 960. ADVANCED NUCLEAR FUEL SECURITY

PROGRAM.

- "(a) DEFINITIONS.—In this section:
- "(1) HALEU TRANSPORTATION PACKAGE.-The term 'HALEU transportation package'

- means a transportation package that is suitable for transporting high-assay, low-enriched uranium
- "(2) HIGH-ASSAY, LOW-ENRICHED URANIUM. The term 'high-assay, low-enriched uranium' means uranium with an assay greater than 5 weight percent, but less than 20 weight percent, of the uranium-235 isotope.
- "(3) HIGH-ENRICHED URANIUM.-The term 'high-enriched uranium' means uranium with an assay of 20 weight percent or more of the uranium-235 isotope.

 "(b) High-Assay, Low-Enriched Uranium
- PROGRAM FOR ADVANCED REACTORS.-
- '(1) Establishment.—Not later than 1 year after the date of enactment of this section. the Secretary shall establish a program to make available high-assay, low-enriched uranium, through contracts for sale, resale, transfer, or lease, for use in commercial or noncommercial advanced nuclear reactors.
- (2) Nuclear fuel ownership —Each lease under this subsection shall include a provision establishing that the high-assay, lowenriched uranium that is the subject of the lease shall remain the property of the Department, including with respect to responsibility for the storage, use, or final disposition of all radioactive waste created by the irradiation, processing, or purification of any leased high-assay, low-enriched uranium.
- "(3) QUANTITY.-In carrying out the program under this subsection, the Secretary shall make available-
- "(A) by December 31, 2022, high-assay, lowenriched uranium containing not less than 2 metric tons of the uranium-235 isotope; and
- (B) by December 31, 2025, high-assay, lowenriched uranium containing not less than 10 metric tons of the uranium-235 isotope (as determined including the quantities of the uranium-235 isotope made available before December 31, 2022).
- "(4) FACTORS FOR CONSIDERATION.—In carrying out the program under this subsection, the Secretary shall take into consideration—
- "(A) options for providing the high-assay. low-enriched uranium under this subsection from a stockpile of uranium owned by the Department (including the National Nuclear Security Administration), including-
 - "(i) fuel that-
- "(I) directly meets the needs of an enduser: but
- "(II) has been previously used or fabricated for another purpose;
- "(ii) fuel that can meet the needs of an end-user after removing radioactive or other contaminants that resulted from a previous use or fabrication of the fuel for research, development, demonstration, or deployment activities of the Department (including activities of the National Nuclear Security Administration); and
- "(iii) fuel from a high-enriched uranium stockpile, which can be blended with lowerassay uranium to become high-assay, low-enriched uranium to meet the needs of an end-
- "(B) requirements to support molybdenum-99 production under the American Medical Isotopes Production Act of 2012 (Public Law 112-239; 126 Stat. 2211).
- (5) LIMITATION.—The Secretary shall not barter or otherwise sell or transfer uranium in any form in exchange for services relating to the final disposition of radioactive waste from uranium that is the subject of a lease under this subsection.
- '(6) SUNSET.—The program under this subsection shall terminate on the earlier of-
 - (A) January 1, 2035; and
- "(B) the date on which uranium enriched up to, but not equal to, 20 weight percent can be obtained in the commercial market from domestic suppliers.
 - (c) Report.

- "(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Secretary shall submit to the appropriate committees of Congress a report that describes actions proposed to be carried out by the Secretary—
- "(A) under the program under subsection (b); or
- "(B) otherwise to enable the commercial use of high-assay, low-enriched uranium.
- "(2) COORDINATION AND STAKEHOLDER INPUT.—In developing the report under this subsection, the Secretary shall seek input from—
 - "(A) the Nuclear Regulatory Commission;
 - "(B) the National Laboratories;
 - "(C) institutions of higher education:
- "(D) producers of medical isotopes;
- "(E) a diverse group of entities operating in the nuclear energy industry; and
- "(F) a diverse group of technology developers.
- "(3) COST AND SCHEDULE ESTIMATES.—The report under this subsection shall include estimated costs, budgets, and timeframes for enabling the use of high-assay, low-enriched uranium.
- "(4) REQUIRED EVALUATIONS.—The report under this subsection shall evaluate—
- "(A) the costs and actions required to establish and carry out the program under subsection (b), including with respect to—
- "(i) proposed preliminary terms for the sale, resale, transfer, and leasing of high-assay, low-enriched uranium (including guidelines defining the roles and responsibilities between the Department and the purchaser, transfer recipient, or lessee); and
- "(ii) the potential to coordinate with purchasers, transfer recipients, and lessees regarding—
 - "(I) fuel fabrication; and
- "(II) fuel transport;
- "(B) the potential sources and fuel forms available to provide uranium for the program under subsection (b);
- "(C) options to coordinate the program under subsection (b) with the operation of the versatile, reactor-based fast neutron source under section 959A;
- "(D) the ability of the domestic uranium market to provide materials for advanced nuclear reactor fuel: and
- "(E) any associated legal, regulatory, and policy issues that should be addressed to enable—
- "(i) the program under subsection (b); and
- "(ii) the establishment of a domestic industry capable of providing high-assay, low-enriched uranium for commercial and non-commercial purposes, including with respect to the needs of—
- "(I) the Department;
- "(II) the Department of Defense; and
- "(III) the National Nuclear Security Administration
- "(d) HALEU TRANSPORTATION PACKAGE RE-SEARCH PROGRAM.—
- "(1) IN GENERAL.—As soon as practicable after the date of enactment of this section, the Secretary shall establish a research, development, and demonstration program under which the Secretary shall provide financial assistance, on a competitive basis, to establish the capability to transport high-assay, low-enriched uranium.
- "(2) REQUIREMENT.—The focus of the program under this subsection shall be to establish 1 or more HALEU transportation packages that can be certified by the Nuclear Regulatory Commission to transport high-assay, low-enriched uranium to the various facilities involved in producing or using nuclear fuel containing high-assay, low-enriched uranium, such as—
 - "(A) enrichment facilities;
 - "(B) fuel processing facilities;
 - "(C) fuel fabrication facilities; and

- "(D) nuclear reactors.".
- (b) CLERICAL AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 594; 132 Stat. 3160) (as amended by section 1508(b)) is amended by inserting after the item relating to section 959B the following:
- "Sec. 960. Advanced nuclear fuel security program.".

SEC. 1510. INTERNATIONAL NUCLEAR ENERGY COOPERATION.

(a) IN GENERAL.—Subtitle H of Title IX of the Energy Policy Act of 2005 (42 U.S.C. 16341 et seq.) is amended by adding at the end the following:

"SEC. 986B. INTERNATIONAL NUCLEAR ENERGY COOPERATION.

- "(a) IN GENERAL.—The Secretary shall carry out a program to develop bilateral collaboration initiatives with a variety of countries through—
- "(1) research and development agreements; "(2) other relevant arrangements and ac-
- tion plan updates; and "(3) maintaining existing multilateral co-
- "(3) maintaining existing multilateral cooperation commitments of— "(A) the International Framework for Nu-
- clear Energy Cooperation;
 "(B) the Generation IV International
- Forum; "(C) the International Atomic Energy
- Agency; and "(D) any other international collaborative effort with respect to advanced nuclear reac-
- tor operations and safety. "(b) SUBPROGRAM.—
- "(1) IN GENERAL.—In carrying out the program under subsection (a), the Secretary shall establish a subprogram that shall—
- "(A) support diplomatic, nonproliferation, climate, and international economic objectives for the safe, secure, and peaceful use of nuclear technology in countries developing nuclear energy programs, with a focus on countries that have increased civil nuclear cooperation with Russia and China; and
- "(B) be modeled after the International Military Education and Training program of the Department of State.
- "(2) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the subprogram under this subsection \$5,500,000 for each of fiscal years 2021 through 2025.
- "(c) REQUIREMENTS.—The program under subsection (a) shall be carried out—
- "(1) to facilitate, to the maximum extent practicable, workshops and expert-based exchanges to engage industry, stakeholders, and foreign governments regarding international civil nuclear issues, such as training, financing, safety, and options for multinational cooperation on used nuclear fuel disposal; and
 - "(2) in coordination with—
 - ``(A) the National Security Council;
 - "(B) the Secretary of State;
- "(C) the Secretary of Commerce; and
- $\mbox{``(D)}$ the Nuclear Regulatory Commission.''.
- (b) CONFORMING AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109–58; 119 Stat. 600) is amended by inserting after the item relating to section 986A the following:
- "Sec. 986B. International nuclear energy cooperation.".

SEC. 1511. INTEGRATED ENERGY SYSTEMS PROGRAM.

- (a) Program.—
- (1) Establishment.—
- (A) IN GENERAL.—The Secretary shall establish a program, to be known as the "Integrated Energy Systems Program" (referred to in this subsection as the "program")—
- (i) to maximize energy production and efficiency;

- (ii) to develop energy systems involving the integration of nuclear energy with renewable energy, fossil energy, and energy storage; and
- (iii) to expand the use of emissions-reducing energy technologies into nonelectric sectors to achieve significant reductions in environmental emissions.
- (B) PROGRAM ADMINISTRATION; PARTNERS.— The program shall be carried out by the Under Secretary of Energy, in partnership with—
- (i) relevant offices within the Department;
- (ii) National Laboratories;
- (iii) institutions of higher education; and
- (iv) the private sector.
- (C) GOALS AND MILESTONES.—The Secretary shall establish quantitative goals and milestones for the program.
- (2) RESEARCH AREAS.—Research areas under the program may include—
- (A) technology innovation to further the expansion of emissions-reducing energy technologies to accommodate a modern, resilient grid system by—
- (i) effectively leveraging multiple energy sources:
- (ii) enhancing and streamlining engineering design;
- (iii) carrying out process demonstrations to optimize performance; and
 - (iv) streamlining regulatory review;
- (B) advanced power cycles, energy extraction, and processing of complex hydrocarbons to produce high-value chemicals;
- (C) efficient use of emissions-reducing energy technologies for hydrogen production to support transportation and industrial needs;
- (D) enhancement and acceleration of domestic manufacturing and desalinization technologies and processes by optimally using clean energy sources;
- (E) more effective thermal energy use, transport, and storage;
- (F) the demonstration of nuclear energy for—
- (i) the production of chemicals, metals, and fuels:
- (ii) the capture, use, and storage of carbon; (iii) renewable integration with an inte-
- grated energy system;
 (iv) conversion of carbon feedstock, such as coal, biomass, natural gas, and refuse waste, to higher value nonelectric commodities; and
- (v) the generation of heat used, directly or through an energy storage system, in a variety of processes that may include electricity, hydrogen, or other industrial applications:
- (G) the development of new analysis capabilities to identify the best ways—
- (i) to leverage multiple energy sources in a given region; and
- (ii) to quantify the benefits of integrated energy systems; and
- (H) any other area that, as determined by the Secretary, meets the purpose and goals of the program.
- (3) GRANTS.—The Secretary may award grants under the program to support the goals of the program.
- (b) REPORT ON DUPLICATIVE PROGRAMS.— Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Secretary shall submit to Congress a report identifying any program that is duplicative of the program established under subsection (a)(1)(A).

Subtitle F—Industrial Technologies PART I—INNOVATION

SEC. 1601, PURPOSE.

The purpose of this part and the amendments made by this part is to encourage the development and evaluation of innovative technologies aimed at increasing—

- (1) the technological and economic competitiveness of industry and manufacturing in the United States; and
- (2) the emissions reduction of nonpower industrial sectors.

SEC. 1602. COORDINATION OF RESEARCH AND DEVELOPMENT OF ENERGY EFFI-CIENT TECHNOLOGIES FOR INDUSTRY.

Section 6(a) of the American Energy Manufacturing Technical Corrections Act (42 U.S.C. 6351(a)) is amended—

- (1) by striking "Industrial Technologies Program" each place it appears and inserting "Advanced Manufacturing Office"; and
- (2) in the matter preceding paragraph (1), by striking "Office of Energy" and all that follows through "Office of Science" and inserting "Department of Energy".

SEC. 1603. INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY DEVELOPMENT PROGRAM.

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 is amended by inserting after section 454 (as added by section 1022(b)) the following:

"SEC. 455. INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY DEVELOPMENT PRO-GRAM.

- "(a) Definitions.—In this section:
- "(1) DIRECTOR.—The term 'Director' means the Director of the Office of Science and Technology Policy.
- "(2) ELIGIBLE ENTITY.—The term 'eligible entity' means—
- "(A) a scientist or other individual with knowledge and expertise in emissions reduction:
 - "(B) an institution of higher education;
 - "(C) a nongovernmental organization;
 - "(D) a National Laboratory;
 - "(E) a private entity; and
- "(F) a partnership or consortium of 2 or more entities described in subparagraphs (B) through (E).
 - "(3) Emissions reduction.—
- "(A) IN GENERAL.—The term 'emissions reduction' means the reduction, to the maximum extent practicable, of net nonwater greenhouse gas emissions to the atmosphere by energy services and industrial processes.
- "(B) EXCLUSION.—The term 'emissions reduction' does not include the elimination of carbon embodied in the principal products of industrial manufacturing.
- "(4) Institution of Higher Education.— The term 'institution of higher education' has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).
- ``(5) PROGRAM.—The term 'program' means the program established under subsection (b)(1).
- (b) INDUSTRIAL EMISSIONS REDUCTION TECHNOLOGY DEVELOPMENT PROGRAM.—
- "(1) IN GENERAL.—Not later than 1 year after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in consultation with the Director, the heads of relevant Federal agencies, National Laboratories, industry, and institutions of higher education, shall establish a crosscutting industrial emissions reduction technology development program of research, development, demonstration, and commercial application to further the development and commercialization of innovative technologies that—
- "(A) increase the technological and economic competitiveness of industry and manufacturing in the United States;
- "(B) increase the viability and competitiveness of United States industrial technology exports; and
- "(C) achieve emissions reduction in nonpower industrial sectors.
- "(2) COORDINATION.—In carrying out the program, the Secretary shall—

- "(A) coordinate with each relevant office in the Department and any other Federal agency;
- "(B) coordinate and collaborate with the Industrial Technology Innovation Advisory Committee established under section 456; and
- "(C) coordinate and seek to avoid duplication with the energy-intensive industries program established under section 452.
- "(3) LEVERAGE OF EXISTING RESOURCES.—In carrying out the program, the Secretary shall leverage, to the maximum extent practicable—
- "(A) existing resources and programs of the Department and other relevant Federal agencies; and
 - "(B) public-private partnerships.
- "(c) Focus Areas.—The program shall focus on—
- "(1) industrial production processes, including technologies and processes that—
- "(A) achieve emissions reduction in highemissions industrial materials production processes, including production processes for iron, steel, steel mill products, aluminum, cement, glass, pulp, paper, and industrial ceramics:
- "(B) achieve emissions reduction in medium- and high-temperature heat generation, including—
- "(i) through electrification of heating processes;
- "(ii) through renewable heat generation technology:
- "(iii) through combined heat and power; and
- "(iv) by switching to alternative fuels, including hydrogen and nuclear energy;
- "(C) achieve emissions reduction in chemical production processes, including by incorporating, if appropriate and practicable, principles, practices, and methodologies of sustainable, green chemistry and engineering"
- "(D) leverage smart manufacturing technologies and principles, digital manufacturing technologies, and advanced data analytics to develop advanced technologies and practices in information, automation, monitoring, computation, sensing, modeling, and networking to—
- "(i) model and simulate manufacturing production lines;
- "(ii) monitor and communicate production line status;
- "(iii) manage and optimize energy productivity and cost throughout production; and
- "(iv) model, simulate, and optimize the energy efficiency of manufacturing processes;
- manufacturing and sustainable chemistry to minimize the negative environmental impacts of manufacturing while conserving energy and resources, including—
- "(i) by designing products that enable reuse, refurbishment, remanufacturing, and recycling:
- "(ii) by minimizing waste from industrial processes, including through the reuse of waste as other resources in other industrial processes for mutual benefit: and
- "(iii) by increasing resource efficiency; and "(F) increase the energy efficiency of industrial processes;
- "(2) alternative materials that produce fewer emissions during production and result in fewer emissions during use;
- "(3) development of net-zero emissions liquid and gaseous fuels;
- "(4) emissions reduction in shipping, aviation, and long distance transportation;
- "(5) carbon capture technologies for industrial processes;
- "(6) other technologies that achieve netzero emissions in nonpower industrial sectors, as determined by the Secretary, in consultation with the Director; and

- "(7) high-performance computing to develop advanced materials and manufacturing processes contributing to the focus areas described in paragraphs (1) through (6), including—
- "(A) modeling, simulation, and optimization of the design of energy efficient and sustainable products; and
- "(B) the use of digital prototyping and additive manufacturing to enhance product design.
- "(d) Grants, Contracts, Cooperative Agreements, and Demonstration Projects.—
- "(1) GRANTS.—In carrying out the program, the Secretary shall award grants on a competitive basis to eligible entities for projects that the Secretary determines would best achieve the goals of the program.
- "(2) CONTRACTS AND COOPERATIVE AGREE-MENTS.—In carrying out the program, the Secretary may enter into contracts and cooperative agreements with eligible entities and Federal agencies for projects that the Secretary determines would further the purposes of the program.
- "(3) DEMONSTRATION PROJECTS.—In supporting technologies developed under this section, the Secretary shall fund demonstration projects that test and validate technologies described in subsection (c).
- "(4) APPLICATION.—An entity seeking funding or a contract or agreement under this subsection shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.
- "(5) COST SHARING.—In awarding funds under this section, the Secretary shall require cost sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352)."
- (b) TECHNICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (Public Law 110–140; 121 Stat. 1494) (as amended by section 1022(c)) is amended by inserting after the item relating to section 454 the following:
- "Sec. 455. Industrial emissions reduction technology development program.".

SEC. 1604. INDUSTRIAL TECHNOLOGY INNOVATION ADVISORY COMMITTEE.

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 is amended by inserting after section 455 (as added by section 1603(a)) the following:

"SEC. 456. INDUSTRIAL TECHNOLOGY INNOVA-TION ADVISORY COMMITTEE.

- "(a) DEFINITIONS.—In this section:
- "(1) COMMITTEE.—The term 'Committee' means the Industrial Technology Innovation Advisory Committee established under subsection (b).
- "(2) DIRECTOR.—The term 'Director' means the Director of the Office of Science and Technology Policy.
- "(3) EMISSIONS REDUCTION.—The term 'emissions reduction' has the meaning given the term in section 455(a).
- ''(4) PROGRAM.—The term 'program' means the industrial emissions reduction technology development program established under section 455(b)(1).
- "(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary, in consultation with the Director, shall establish an advisory committee, to be known as the 'Industrial Technology Innovation Advisory Committee'.
- "(c) Membership.—
- "(1) APPOINTMENT.—The Committee shall be comprised of not fewer than 14 members and not more than 18 members, who shall be appointed by the Secretary, in consultation with the Director.

- "(2) REPRESENTATION.—Members appointed pursuant to paragraph (1) shall include—
- "(A) not less than 1 representative of each relevant Federal agency, as determined by the Secretary:
- "(B) the Chair of the Secretary of Energy Advisory Board, if that position is filled;
- "(C) not less than 2 representatives of labor groups;
- "(D) not less than 3 representatives of the research community, which shall include academia and National Laboratories;
- "(E) not less than 2 representatives of nongovernmental organizations;
- "(F) not less than 6 representatives of small- and large-scale industry, the collective expertise of which shall cover every focus area described in section 455(c); and
- "(G) any other individuals the Secretary, in coordination with the Director, determines to be necessary to ensure that the Committee is comprised of a diverse group of representatives of industry, academia, independent researchers, and public and private entities.
- "(3) CHAIR.—The Secretary shall designate a member of the Committee to serve as Chair.
- "(d) Duties .-
- "(1) IN GENERAL.—The Committee shall—
- "(A) in consultation with the Secretary and the Director, propose missions and goals for the program, which shall be consistent with the purposes of the program described in section 455(b)(1); and
- "(B) advise the Secretary with respect to the program—
- "(i) by identifying and evaluating any technologies being developed by the private sector relating to the focus areas described in section 455(c);
- "(ii) by identifying technology gaps in the private sector in those focus areas, and making recommendations to address those gaps:
- "(iii) by surveying and analyzing factors that prevent the adoption of emissions reduction technologies by the private sector; and
- "(iv) by recommending technology screening criteria for technology developed under the program to encourage adoption of the technology by the private sector; and
- $\lq\lq(C)$ develop the strategic plan described in paragraph (2).
 - "(2) STRATEGIC PLAN.—
- "(A) PURPOSE.—The purpose of the strategic plan developed under paragraph (1)(C) is to achieve the goals of the program in the focus areas described in section 455(c).
- "(B) CONTENTS.—The strategic plan developed under paragraph (1)(C) shall—
- "(i) specify near-term and long-term qualitative and quantitative objectives relating to each focus area described in section 455(c), including research, development, demonstration, and commercial application objectives;
- "(ii) specify the anticipated timeframe for achieving the objectives specified under clause (i);
- "(iii) include plans for developing emissions reduction technologies that are globally cost-competitive;
- "(iv) identify the public and private costs of achieving the objectives specified under clause (i); and
- "(v) estimate the economic and employment impact in the United States of achieving those objectives.
 - "(e) Meetings.—
- $\lq\lq(1)$ Frequency.—The Committee shall meet not less frequently than 2 times per year, at the call of the Chair.
- "(2) INITIAL MEETING.—Not later than 30 days after the date on which the members are appointed under subsection (b), the Committee shall hold its first meeting.
 - "(f) COMMITTEE REPORT.—

- "(1) IN GENERAL.—Not later than 2 years after the date of enactment of the American Energy Innovation Act of 2020, and not less frequently than once every 3 years thereafter, the Committee shall submit to the Secretary a report on the progress of achieving the purposes of the program.
- "(2) CONTENTS.—The report under paragraph (1) shall include—
- "(A) a description of any technology innovation opportunities identified by the Committee;
- "(B) a description of any technology gaps identified by the Committee under subsection (d)(1)(B)(ii);
- "(C) recommendations for improving technology screening criteria and management of the program:
- "(D) an evaluation of the progress of the program and the research and development funded under the program;
- "(E) any recommended changes to the focus areas of the program described in section 455(c);
- "(F) a description of the manner in which the Committee has carried out the duties described in subsection (d)(1) and any relevant findings as a result of carrying out those duties:
- "(G) if necessary, an update to the strategic plan developed by the Committee under subsection (d)(1)(C);
- "(H) the progress made in achieving the goals set out in that strategic plan;
- "(I) a review of the management, coordination, and industry utility of the program;
- "(J) an assessment of the extent to which progress has been made under the program in developing commercial, cost-competitive technologies in each focus area described in section 455(c); and
- "(K) an assessment of the effectiveness of the program in coordinating efforts within the Department and with other Federal agencies to achieve the purposes of the program.
- "(g) REPORT TO CONGRESS.—Not later than 60 days after receiving a report from the Committee under subsection (f), the Secretary shall submit a copy of that report to the Committees on Appropriations and Science, Space, and Technology of the House of Representatives, the Committees on Appropriations and Energy and Natural Resources of the Senate, and any other relevant Committee of Congress.
- "(h) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—Except as otherwise provided in this section, the Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the Committee "
- (b) TECHNICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (Public Law 110-140; 121 Stat. 1494) (as amended by section 1603(b)) is amended by inserting after the item relating to section 455 the following:
- "Sec. 456. Industrial Technology Innovation Advisory Committee.".

SEC. 1605. TECHNICAL ASSISTANCE PROGRAM TO IMPLEMENT INDUSTRIAL EMISSIONS REDUCTION.

(a) IN GENERAL.—The Energy Independence and Security Act of 2007 is amended by inserting after section 456 (as added by section 1604(a)) the following:

"SEC. 457. TECHNICAL ASSISTANCE PROGRAM TO IMPLEMENT INDUSTRIAL EMISSIONS REDUCTION.

- "(a) Definitions.—In this section:
- $\lq\lq(1)$ ELIGIBLE ENTITY.—The term 'eligible entity' means—
- "(A) a State;
- "(B) a unit of local government;
- "(C) a territory or possession of the United States;
- "(D) a relevant State or local office, including an energy office:

- "(E) a tribal organization (as defined in section 3765 of title 38, United States Code);
- "(F) an institution of higher education;
- "(G) a private entity.
- "(2) EMISSIONS REDUCTION.—The term 'emissions reduction' has the meaning given the term in section 455(a).
- "(3) INSTITUTION OF HIGHER EDUCATION.— The term 'institution of higher education' has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).
- "(4) PROGRAM.—The term 'program' means the program established under subsection (b).
- "(b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall establish a program to provide technical assistance to eligible entities to carry out an activity described in subsection (c).
- "(c) ACTIVITIES DESCRIBED.—An activity referred to in subsection (b) is any of the following activities carried out for the purpose of achieving emissions reduction in nonpower industrial sectors:
- $(\tilde{1})$ Adopting emissions reduction technologies.
- "(2) Establishing goals and priorities to accelerate the development and evaluation of relevant technologies.
- "(3) Developing collaborations across States, local governments, and territories and possessions of the United States.
- "(4) Reviewing the appropriate emissions reduction technologies available for a particular eligible entity.
- "(5) Developing a roadmap for implementing emissions reduction technologies for a particular eligible entity.
- "(6) Any other activity determined appropriate by the Secretary.
 - "(d) APPLICATIONS.—
- "(1) IN GENERAL.—An eligible entity desiring technical assistance under the program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.
- "(2) APPLICATION PROCESS.—The Secretary shall seek applications for technical assistance under the program on a periodic basis, but not less frequently than once every 12 months.
- "(3) FACTORS FOR CONSIDERATION.—In selecting eligible entities for technical assistance under the program, the Secretary shall—
 - "(A) give priority to-
- "(i) activities carried out with technical assistance under the program that have the greatest potential for achieving emissions reduction in nonpower industrial sectors;
- "(ii) activities carried out in a State in which there are active or inactive industrial facilities that may be used or retrofitted to carry out activities under the focus areas described in section 455(c); and
- "(iii) activities carried out in an economically distressed area (as described in section 301(a) of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161(a))); and
 - "(B) ensure that—
 "(i) there is geographic diversity among
- the eligible entities selected; and "(ii) the activities carried out with technical assistance under the program reflect a majority of the focus areas described in section 455(c).".
- (b) TECHNICAL AMENDMENT.—The table of contents of the Energy Independence and Security Act of 2007 (Public Law 110–140; 121 Stat. 1494) (as amended by section 1604(b)) is amended by inserting after the item relating to section 456 the following:

"Sec. 457. Technical assistance program to implement industrial emissions reduction.".

PART II—SMART MANUFACTURING SEC. 1611. DEFINITIONS.

In this part:

- (1) ENERGY MANAGEMENT SYSTEM.—The term "energy management system" means a business management process based on standards of the American National Standards Institute that enables an organization to follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency, security, use, and consumption.
- (2) INDUSTRIAL ASSESSMENT CENTER.—The term "industrial assessment center" means a center located at an institution of higher education that—
- (A) receives funding from the Department;
- (B) provides an in-depth assessment of small- and medium-size manufacturer plant sites to evaluate the facilities, services, and manufacturing operations of the plant site; and
- (C) identifies opportunities for potential savings for small- and medium-size manufacturer plant sites from energy efficiency improvements, waste minimization, pollution prevention, and productivity improvement.
- (3) INFORMATION AND COMMUNICATION TECHNOLOGY.—The term "information and communication technology" means any electronic system or equipment (including the content contained in the system or equipment) used to create, convert, communicate, or duplicate data or information, including computer hardware, firmware, software, communication protocols, networks, and data interfaces.
- (4) Institution of Higher Education.—The term "institution of higher education" has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).
- (5) NORTH AMERICAN INDUSTRY CLASSIFICA-TION SYSTEM.—The term "North American Industry Classification System" means the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data relating to the business economy of the United States.
- (6) SMALL AND MEDIUM MANUFACTURERS.— The term "small and medium manufacturers" means manufacturing firms—
- (A) classified in the North American Industry Classification System as any of sectors 31 through 33:
- (B) with gross annual sales of less than \$100,000,000;
- (C) with fewer than 500 employees at the plant site; and
- (D) with annual energy bills totaling more than \$100,000 and less than \$2.500,000.
- (7) SMART MANUFACTURING.—The term "smart manufacturing" means advanced technologies in information, automation, monitoring, computation, sensing, modeling, artificial intelligence, analytics, and networking that—
 - (A) digitally—
- (i) simulate manufacturing production lines:
- (ii) operate computer-controlled manufacturing equipment;
- (iii) monitor and communicate production line status; and
- (iv) manage and optimize energy productivity and cost throughout production;
- (B) model, simulate, and optimize the energy efficiency of a factory building;
- (C) monitor and optimize building energy performance;
- (D) model, simulate, and optimize the design of energy efficient and sustainable products, including the use of digital prototyping

- and additive manufacturing to enhance product design;
- (E) connect manufactured products in networks to monitor and optimize the performance of the networks, including automated network operations; and
- (F) digitally connect the supply chain network.

SEC. 1612. DEVELOPMENT OF NATIONAL SMART MANUFACTURING PLAN.

- (a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Secretary, in consultation with the National Academies, shall develop and complete a national plan for smart manufacturing technology development and deployment to improve the productivity and energy efficiency of the manufacturing sector of the United States.
 - (b) Content.—
- (1) IN GENERAL.—The plan developed under subsection (a) shall identify areas in which agency actions by the Secretary and other heads of relevant Federal agencies would—
- (A) facilitate quicker development, deployment, and adoption of smart manufacturing technologies and processes;
- (B) result in greater energy efficiency and lower environmental impacts for all American manufacturers; and
- (C) enhance competitiveness and strengthen the manufacturing sectors of the United States.
- (2) INCLUSIONS.—Agency actions identified under paragraph (1) shall include—
- (A) an assessment of previous and current actions of the Department relating to smart manufacturing.
- (B) the establishment of voluntary interconnection protocols and performance standards:
- (C) the use of smart manufacturing to improve energy efficiency and reduce emissions in supply chains across multiple companies;
- (D) actions to increase cybersecurity in smart manufacturing infrastructure;
- (E) deployment of existing research re-
- (F) the leveraging of existing high-performance computing infrastructure; and
- (G) consideration of the impact of smart manufacturing on existing manufacturing jobs and future manufacturing jobs.
- (c) BIENNIAL REVISIONS.—Not later than 2 years after the date on which the Secretary completes the plan under subsection (a), and not less frequently than once every 2 years thereafter, the Secretary shall revise the plan to account for advancements in information and communication technology and manufacturing needs.
- (d) REPORT.—Annually until the completion of the plan under subsection (a), the Secretary shall submit to Congress a report on the progress made in developing the plan.
- (e) FUNDING.—The Secretary shall use unobligated funds of the Department to carry out this section.

SEC. 1613. LEVERAGING EXISTING AGENCY PROGRAMS TO ASSIST SMALL AND MEDIUM MANUFACTURERS.

- (a) EXPANSION OF TECHNICAL ASSISTANCE PROGRAMS.—The Secretary shall expand the scope of technologies covered by the Industrial Assessment Centers of the Department—
- (1) to include smart manufacturing technologies and practices; and
- (2) to equip the directors of the Industrial Assessment Centers with the training and tools necessary to provide technical assistance in smart manufacturing technologies and practices, including energy management systems, to manufacturers.
- (b) FUNDING.—The Secretary shall use unobligated funds of the Department to carry out this section.

SEC. 1614. LEVERAGING SMART MANUFACTURING INFRASTRUCTURE AT NATIONAL LABORATORIES.

(a) STUDY.

- (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall conduct a study on how the Department can increase access to existing high-performance computing resources in the National Laboratories, particularly for small and medium manufacturers.
- (2) INCLUSIONS.—In identifying ways to increase access to National Laboratories under paragraph (1), the Secretary shall—
- (A) focus on increasing access to the computing facilities of the National Laboratories; and
 - (B) ensure that—
- (i) the information from the manufacturer is protected; and
- (ii) the security of the National Laboratory facility is maintained.
- (3) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study.
- (b) ACTIONS FOR INCREASED ACCESS.—The Secretary shall facilitate access to the National Laboratories studied under subsection (a) for small and medium manufacturers so that small and medium manufacturers can fully use the high-performance computing resources of the National Laboratories to enhance the manufacturing competitiveness of the United States.

SEC. 1615. STATE MANUFACTURING LEADERSHIP.

- (a) FINANCIAL ASSISTANCE AUTHORIZED.— The Secretary may provide financial assistance on a competitive basis to States for the establishment of programs to be used as models for supporting the implementation of smart manufacturing technologies.
 - (b) APPLICATIONS.—
- (1) IN GENERAL.—To be eligible to receive financial assistance under this section, a State shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.
- (2) CRITERIA.—The Secretary shall evaluate an application for financial assistance under this section on the basis of merit using criteria identified by the Secretary, including—
- (A) technical merit, innovation, and impact;
- (B) research approach, workplan, and deliverables:
- (C) academic and private sector partners;
 - (D) alternate sources of funding.
 - (c) REQUIREMENTS.-
- (1) TERM.—The term of an award of financial assistance under this section shall not exceed 3 years.
- (2) MAXIMUM AMOUNT.—The amount of an award of financial assistance under this section shall be not more than \$2,000,000.
- (3) MATCHING REQUIREMENT.—Each State that receives financial assistance under this section shall contribute matching funds in an amount equal to not less than 30 percent of the amount of the financial assistance.
 - (d) Use of Funds.-
- (1) IN GENERAL.—A State may use financial assistance provided under this section—
- (A) to facilitate access to high-performance computing resources for small and medium manufacturers; and
- (B) to provide assistance to small and medium manufacturers to implement smart manufacturing technologies and practices.
- (e) EVALUATION.—The Secretary shall conduct semiannual evaluations of each award of financial assistance under this section—
- (1) to determine the impact and effectiveness of programs funded with the financial assistance; and
- (2) to provide guidance to States on ways to better execute the program of the State.

(f) AUTHORIZATION.—There is authorized to be appropriated to the Secretary to carry out this section \$10,000,000 for each of fiscal years 2021 through 2024.

SEC. 1616. REPORT.

The Secretary annually shall submit to Congress and make publicly available a report on the progress made in advancing smart manufacturing in the United States.

Subtitle G-Vehicles

SEC. 1701. OBJECTIVES.

The objectives of this subtitle are-

- (1) to establish a consistent and consolidated authority for the vehicle technology program at the Department;
- (2) to develop United States technologies and practices that—
- (A) improve the fuel efficiency and emissions of all vehicles produced in the United States; and
- (B) reduce vehicle reliance on petroleum-based fuels;
- (3) to support domestic research, development, engineering, demonstration, and commercial application and manufacturing of advanced vehicles, engines, and components;
- (4) to enable vehicles to move larger volumes of goods and more passengers with less energy and emissions;
- (5) to develop cost-effective advanced technologies for wide-scale utilization throughout the passenger, commercial, government, and transit vehicle sectors;
- (6) to allow for greater consumer choice of vehicle technologies and fuels;
- (7) shorten technology development and integration cycles in the vehicle industry;
- (8) to ensure a proper balance and diversity of Federal investment in vehicle technologies; and
- (9) to strengthen partnerships between Federal and State governmental agencies and the private and academic sectors.

SEC. 1702. COORDINATION AND NONDUPLICA-TION.

The Secretary shall ensure, to the maximum extent practicable, that the activities authorized by this subtitle do not duplicate those of other programs within the Department or other relevant research agencies.

SEC. 1703. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary for research, development, engineering, demonstration, and commercial application of vehicles and related technologies in the United States, including activities authorized under this subtitle—

- (1) for fiscal year 2021, \$313,567,000;
- (2) for fiscal year 2022, \$326,109,000;
- (3) for fiscal year 2023, \$339,154,000;
- (4) for fiscal year 2024, \$352,720,000; and
- (5) for fiscal year 2025, \$366,829,000.

SEC. 1704. REPORTING.

- (a) TECHNOLOGIES DEVELOPED.—Not later than 18 months after the date of enactment of this Act and annually thereafter through 2025, the Secretary shall submit to Congress a report regarding the technologies developed as a result of the activities authorized by this subtitle, with a particular emphasis on whether the technologies were successfully adopted for commercial applications, and if so, whether products relying on those technologies are manufactured in the United States.
- (b) ADDITIONAL MATTERS.—At the end of each fiscal year through 2025, the Secretary shall submit to the relevant Congressional committees of jurisdiction an annual report describing activities undertaken in the previous year under this subtitle, active industry participants, the status of public-private partnerships, progress of the program in meeting goals and timelines, and a strategic plan for funding of activities across agencies. SEC. 1705. VEHICLE RESEARCH AND DEVELOPMENT.
 - (a) Program.—

- (1) ACTIVITIES.—The Secretary shall conduct a program of basic and applied research, development, engineering, demonstration, and commercial application activities on materials, technologies, and processes with the potential to substantially reduce or eliminate petroleum use and the emissions of the passenger and commercial vehicles of the United States, including activities in the areas of—
 - (A) electrification of vehicle systems;
- (B) batteries, ultracapacitors, and other energy storage devices;
- (C) power electronics;
- (D) vehicle, component, and subsystem manufacturing technologies and processes;
- (E) engine efficiency and combustion optimization;
 - (F) waste heat recovery;
 - (G) transmission and drivetrains:
- (H) hydrogen vehicle technologies, including fuel cells and internal combustion engines, and hydrogen infrastructure, including hydrogen energy storage to enable renewables and provide hydrogen for fuel and power;
 - (I) natural gas vehicle technologies;
- (J) aerodynamics, rolling resistance (including tires and wheel assemblies), and accessory power loads of vehicles and associated equipment;
- (K) vehicle weight reduction, including lightweighting materials and the development of manufacturing processes to fabricate, assemble, and use dissimilar materials:
 - (L) friction and wear reduction;
 - (M) engine and component durability;
 - (N) innovative propulsion systems;
 - (O) advanced boosting systems; (P) hydraulic hybrid technologies;
- (Q) engine compatibility with and optimization for a variety of transportation fuels including natural gas and other liquid and gaseous fuels:
- (R) predictive engineering, modeling, and simulation of vehicle and transportation systems;
- (S) refueling and charging infrastructure for alternative fueled and electric or plug-in electric hybrid vehicles, including the unique challenges facing rural areas;
- (T) gaseous fuels storage systems and system integration and optimization:
- (U) sensing, communications, and actuation technologies for vehicle, electrical grid, and infrastructure;
- (V) efficient use, substitution, and recycling of potentially critical materials in vehicles, including rare earth elements and precious metals, at risk of supply disruption;
 - (W) aftertreatment technologies;
- (X) thermal management of battery systems;
- (Y) retrofitting advanced vehicle technologies to existing vehicles;
- (Z) development of common standards, specifications, and architectures for both transportation and stationary battery applications:
- (AA) advanced internal combustion engines;
 - (BB) mild hybrid;
- (CC) engine down speeding;
- $\left(\mathrm{DD}\right)$ vehicle-to-vehicle, vehicle-to-pedestrian, and vehicle-to-infrastructure technologies; and
- (EE) other research areas as determined by the Secretary.
- (2) Transformational technology.—The Secretary shall ensure that the Department continues to support research, development, engineering, demonstration, and commercial application activities and maintains competency in mid- to long-term transformational vehicle technologies with potential to achieve reductions in emissions, including activities in the areas of—

- (A) hydrogen vehicle technologies, including fuel cells, hydrogen storage, infrastructure, and activities in hydrogen technology validation and safety codes and standards;
- (B) multiple battery chemistries and novel energy storage devices, including nonchemical batteries and electromechanical storage technologies such as hydraulics, flywheels, and compressed air storage:
- (C) communication and connectivity among vehicles, infrastructure, and the electrical grid; and
- (D) other innovative technologies research and development, as determined by the Secretary.
 - (3) Industry participation.—
- (A) In GENERAL.—To the maximum extent practicable, activities under this subtitle shall be carried out in partnership or collaboration with automotive manufacturers, heavy commercial, vocational, and transit vehicle manufacturers, qualified plug-in electric vehicle manufacturers, compressed natural gas vehicle manufacturers, vehicle and engine equipment and component manufacturers, manufacturing equipment manufacturers, advanced vehicle service providers, fuel producers and energy suppliers, electric utilities, universities, National Laboratories, and independent research laboratories.
- (B) REQUIREMENTS.—In carrying out this subtitle, the Secretary shall—
- (i) determine whether a wide range of companies that manufacture or assemble vehicles or components in the United States are represented in ongoing public-private partnership activities, including firms that have not traditionally participated in federally sponsored research and development activities, and where possible, partner with such firms that conduct significant and relevant research and development activities in the United States:
- (ii) leverage the capabilities and resources of, and formalize partnerships with, industry-led stakeholder organizations, nonprofit organizations, industry consortia, and trade associations with expertise in the research and development of, and education and outreach activities in, advanced automotive and commercial vehicle technologies;
- (iii) develop more effective processes for transferring research findings and technologies to industry;
- (iv) support public-private partnerships, dedicated to overcoming barriers in commercial application of transformational vehicle technologies, that use such industry-led technology development facilities of entities with demonstrated expertise in successfully designing and engineering pre-commercial generations of such transformational technology; and
- (v) promote efforts to ensure that technology research, development, engineering, and commercial application activities funded under this subtitle are carried out in the United States.
- (4) INTERAGENCY AND INTRAAGENCY COORDINATION.—To the maximum extent practicable, the Secretary shall coordinate research, development, demonstration, and commercial application activities among—
- (A) relevant programs within the Department, including—
- (i) the Office of Energy Efficiency and Renewable Energy;
 - (ii) the Office of Science;
- (iii) the Office of Electricity Delivery and Energy Reliability;
 - (iv) the Office of Fossil Energy;
- (v) the Advanced Research Projects Agency—Energy; and
- (vi) other offices as determined by the Secretary; and

- (B) relevant technology research and development programs within other Federal agencies, as determined by the Secretary.
- (5) FEDERAL DEMONSTRATION OF TECHNOLOGIES.—The Secretary shall make information available to procurement programs of Federal agencies regarding the potential to demonstrate technologies resulting from activities funded through programs under this subtitle.
- (6) INTERGOVERNMENTAL COORDINATION.— The Secretary shall seek opportunities to leverage resources and support initiatives of State and local governments in developing and promoting advanced vehicle technologies, manufacturing, and infrastructure.
- (7) CRITERIA.—In awarding grants under the program under this subsection, the Secretary shall give priority to those technologies (either individually or as part of a system) that—
- (A) provide the greatest aggregate fuel savings based on the reasonable projected sales volumes of the technology; and
- (B) provide the greatest increase in United States employment.
- (8) SECONDARY USE APPLICATIONS.—
- (A) IN GENERAL.—The Secretary shall carry out a research, development, and demonstration program that—
- (i) builds on any work carried out under section 915 of the Energy Policy Act of 2005 (42 U.S.C. 16195);
- (ii) identifies possible uses of a vehicle battery after the useful life of the battery in a vehicle has been exhausted;
- (iii) conducts long-term testing to verify performance and degradation predictions and lifetime valuations for secondary uses;
- (iv) evaluates innovative approaches to recycling materials from plug-in electric drive vehicles and the batteries used in plug-in electric drive vehicles:
- (v)(I) assesses the potential for markets for uses described in clause (ii) to develop; and
- (II) identifies any barriers to the development of those markets; and
- (vi) identifies the potential uses of a vehicle battery—
- (I) with the most promise for market development; and
- (II) for which market development would be aided by a demonstration project.
- (B) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress an initial report on the findings of the program described in subparagraph (A), including recommendations for stationary energy storage and other potential applications for batteries used in plug-in electric drive vehicles.
 - (C) SECONDARY USE DEMONSTRATION.-
- (i) IN GENERAL.—Based on the results of the program described in subparagraph (A), the Secretary shall develop guidelines for projects that demonstrate the secondary uses and innovative recycling of vehicle batteries.
- (ii) PUBLICATION OF GUIDELINES.—Not later than 18 months after the date of enactment of this Act, the Secretary shall—
- (I) publish the guidelines described in clause (i); and
- (II) solicit applications for funding for demonstration projects.
- (iii) PILOT DEMONSTRATION PROGRAM.—Not later than 21 months after the date of enactment of this Act, the Secretary shall select proposals for grant funding under this subsection, based on an assessment of which proposals are mostly likely to contribute to the development of a secondary market for batteries.
- (b) MANUFACTURING.—The Secretary shall carry out a research, development, engineering, demonstration, and commercial application program of advanced vehicle manufac-

- turing technologies and practices, including innovative processes—
- (1) to increase the production rate and decrease the cost of advanced battery and fuel cell manufacturing;
- (2) to vary the capability of individual manufacturing facilities to accommodate different battery chemistries and configurations:
- (3) to reduce waste streams, emissions, and energy intensity of vehicle, engine, advanced battery, and component manufacturing processes:
- (4) to recycle and remanufacture used batteries and other vehicle components for reuse in vehicles or stationary applications:
- (5) to develop manufacturing processes to effectively fabricate, assemble, and produce cost-effective lightweight materials such as advanced aluminum and other metal alloys, polymeric composites, and carbon fiber for use in vehicles:
- (6) to produce lightweight high pressure storage systems for gaseous fuels;
- (7) to design and manufacture purposebuilt hydrogen fuel cell vehicles and components;
- (8) to improve the calendar life and cycle life of advanced batteries; and
- (9) to produce permanent magnets for advanced vehicles.

SEC. 1706. MEDIUM- AND HEAVY-DUTY COMMER-CIAL AND TRANSIT VEHICLES PRO-GRAM.

The Secretary, in partnership with relevant research and development programs in other Federal agencies, and a range of appropriate industry stakeholders, shall carry out a program of cooperative research, development, demonstration, and commercial application activities on advanced technologies for medium- to heavy-duty commercial, vocational, recreational, and transit vehicles, including activities in the areas of—

- (1) engine efficiency and combustion research:
- (2) onboard storage technologies for compressed and liquefied natural gas;
- (3) development and integration of engine technologies designed for natural gas operation of a variety of vehicle platforms;
 - (4) waste heat recovery and conversion;
- (5) improved aerodynamics and tire rolling resistance;
- (6) energy and space-efficient emissions control systems;
- (7) mild hybrid, heavy hybrid, hybrid hydraulic, plug-in hybrid, and electric platforms, and energy storage technologies:
- (8) drivetrain optimization;
- (9) friction and wear reduction;
- (10) engine idle and parasitic energy loss reduction;
- (11) electrification of accessory loads;
- (12) onboard sensing and communications technologies:
- (13) advanced lightweighting materials and vehicle designs;
- (14) increasing load capacity per vehicle;
- (15) thermal management of battery systems;
- (16) recharging infrastructure;
- (17) compressed natural gas infrastructure; (18) advanced internal combustion engines;
- (19) complete vehicle and power pack modeling, simulation, and testing;
- (20) hydrogen vehicle technologies, including fuel cells and internal combustion engines, and hydrogen infrastructure, including hydrogen energy storage to enable renewables and provide hydrogen for fuel and power;
- (21) retrofitting advanced technologies onto existing truck fleets;
- (22) advanced boosting systems;
- (23) engine down speeding; and

(24) integration of these and other advanced systems onto a single truck and trailer platform.

SEC. 1707. CLASS 8 TRUCK AND TRAILER SYSTEMS DEMONSTRATION.

- (a) IN GENERAL.—The Secretary shall conduct a competitive grant program to demonstrate the integration of multiple advanced technologies on Class 8 truck and trailer platforms, including a combination of technologies listed in section 1706.
- (b) APPLICANT TEAMS.—Applicant teams may be comprised of truck and trailer manufacturers, engine and component manufacturers, fleet customers, university researchers, and other applicants as appropriate for the development and demonstration of integrated Class 8 truck and trailer systems.

SEC. 1708. TECHNOLOGY TESTING AND METRICS.

The Secretary, in coordination with the partners of the interagency research program described in section 1706—

- (1) shall develop standard testing procedures and technologies for evaluating the performance of advanced heavy vehicle technologies under a range of representative duty cycles and operating conditions, including for heavy hybrid propulsion systems;
- (2) shall evaluate heavy vehicle performance using work performance-based metrics other than those based on miles per gallon, including those based on units of volume and weight transported for freight applications, and appropriate metrics based on the work performed by nonroad systems; and
- (3) may construct heavy duty truck and bus testing facilities.

SEC. 1709. NONROAD SYSTEMS PILOT PROGRAM.

The Secretary shall undertake a pilot program of research, development, demonstration, and commercial applications of technologies to improve total machine or system efficiency for nonroad mobile equipment including agricultural, construction, air, and sea port equipment, and shall seek opportunities to transfer relevant research findings and technologies between the nonroad and on-highway equipment and vehicle sectors.

SEC. 1710. REPEAL OF EXISTING AUTHORITIES.

- (a) IN GENERAL.—Sections 706, 711, 712, and 933 of the Energy Policy Act of 2005 (42 U.S.C. 16051, 16061, 16062, 16233) are repealed.
- (b) ENERGY EFFICIENCY.—Section 911 of the Energy Policy Act of 2005 (42 U.S.C. 16191) is amended—
 - (1) in subsection (a)—
- (A) in paragraph (1)(A), by striking "vehicles, buildings," and inserting "buildings"; and
 - (B) in paragraph (2)—
 - (i) by striking subparagraph (A); and
- (ii) by redesignating subparagraphs (B) through (E) as subparagraphs (A) through (D), respectively; and
 - (2) in subsection (c)—
 - (A) by striking paragraph (3);
- (B) by redesignating paragraph (4) as paragraph (3); and
- (C) in paragraph (3) (as so redesignated), by striking "(a)(2)(D)" and inserting "(a)(2)(C)".

Subtitle H—Department of Energy SEC. 1801. VETERANS' HEALTH INITIATIVE.

- (a) PURPOSES.—The purposes of this section are to advance Department expertise in artificial intelligence and high-performance computing in order to improve health outcomes for veteran populations by—
- (1) supporting basic research through the application of artificial intelligence, high-performance computing, modeling and simulation, machine learning, and large-scale data analytics to identify and solve outcome-defined challenges in the health sciences:
- (2) maximizing the impact of the Department of Veterans Affairs' health and

genomics data housed at the National Laboratories, as well as data from other sources, on science, innovation, and health care outcomes through the use and advancement of artificial intelligence and high-performance computing capabilities of the Department;

- (3) promoting collaborative research through the establishment of partnerships to improve data sharing between Federal agencies, National Laboratories, institutions of higher education, and nonprofit institutions;
- (4) establishing multiple scientific computing user facilities to house and provision available data to foster transformational outcomes; and
- (5) driving the development of technology to improve artificial intelligence, high-performance computing, and networking relevant to mission applications of the Department, including modeling, simulation, machine learning, and advanced data analytics.
- (b) VETERANS HEALTH RESEARCH AND DE-VELOPMENT.—
- (1) IN GENERAL.—The Secretary shall establish and carry out a research program in artificial intelligence and high-performance computing, focused on the development of tools to solve large-scale data analytics and management challenges associated with veteran's healthcare, and to support the efforts of the Department of Veterans Affairs to identify potential health risks and chalutilizing long-term lenges data on healthcare, health risks, and genomic data collected from veteran populations. The Secretary shall carry out this program through a competitive, merit-reviewed process, and consider applications from National Laboratories, institutions of higher education, multi-institutional collaborations, and other appropriate entities.
- (2) PROGRAM COMPONENTS.—In carrying out the program established under paragraph (1), the Secretary may—
- (A) conduct basic research in modeling and simulation, machine learning, large-scale data analytics, and predictive analysis in order to develop novel or optimized algorithms for prediction of disease treatment and recovery;
- (B) develop methods to accommodate large data sets with variable quality and scale, and to provide insight and models for complex systems;
- (C) develop new approaches and maximize the use of algorithms developed through artificial intelligence, machine learning, data analytics, natural language processing, modeling and simulation, and develop new algorithms suitable for high-performance computing systems and large biomedical data sets:
- (D) advance existing and construct new data enclaves capable of securely storing data sets provided by the Department of Veterans Affairs, Department of Defense, and other sources; and
- (E) promote collaboration and data sharing between National Laboratories, research entities, and user facilities of the Department by providing the necessary access and secure data transfer capabilities.
- (3) COORDINATION.—In carrying out the program established under paragraph (1), the Secretary is authorized—
- (A) to enter into memoranda of understanding in order to carry out reimbursable agreements with the Department of Veterans Affairs and other entities in order to maximize the effectiveness of Department research and development to improve veterans' healthcare:
- (B) to consult with the Department of Veterans Affairs and other Federal agencies as appropriate; and
- (C) to ensure that data storage meets all privacy and security requirements established by the Department of Veterans Af-

- fairs, and that access to data is provided in accordance with relevant Department of Veterans Affairs data access policies, including informed consent.
- (4) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources and the Committee on Veterans' Affairs of the Senate, and the Committee on Science, Space, and Technology and the Committee on Veterans' Affairs of the House of Representatives, a report detailing the effectiveness of—
- (A) the interagency coordination between each Federal agency involved in the research program carried out under this subsection;
- (B) collaborative research achievements of the program; and
- (C) potential opportunities to expand the technical capabilities of the Department.
- (5) FUNDING.—There is authorized to be appropriated to the Secretary of Veterans Affairs to carry out this subsection \$27,000,000 during the period of fiscal years 2021 through 2025.
 - (c) INTERAGENCY COLLABORATION.—
- (1) IN GENERAL.—The Secretary is authorized to carry out research, development, and demonstration activities to develop tools to apply to big data that enable Federal agencies, institutions of higher education, nonprofit research organizations, and industry to better leverage the capabilities of the Department to solve complex, big data challenges. The Secretary shall carry out these activities through a competitive, merit-reviewed process, and consider applications from National Laboratories, institutions of higher education, multi-institutional collaborations, and other appropriate entities.
- (2) ACTIVITIES.—In carrying out the research, development, and demonstration activities authorized under paragraph (1), the Secretary may—
- (A) utilize all available mechanisms to prevent duplication and coordinate research efforts across the Department:
- (B) establish multiple user facilities to serve as data enclaves capable of securely storing data sets created by Federal agencies, institutions of higher education, nonprofit organizations, or industry at National Laboratories; and
- (C) promote collaboration and data sharing between National Laboratories, research entities, and user facilities of the Department by providing the necessary access and secure data transfer capabilities.
- (3) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report evaluating the effectiveness of the activities authorized under paragraph (1).
- (4) FUNDING.—There are authorized to be appropriated to the Secretary to carry out this subsection \$15,000,000 for each of fiscal years 2021 through 2025.

SEC. 1802. SMALL SCALE LNG ACCESS.

- Section 3 of the Natural Gas Act (15 U.S.C. 717b) is amended by striking subsection (c) and inserting the following:
- "(c) EXPEDITED APPLICATION AND APPROVAL PROCESS.—
- "(1) IN GENERAL.—For purposes of subsection (a), the following shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay:
- "(A) The importation of the natural gas referred to in subsection (b).
- "(B) Subject to the last sentence of subsection (a), the exportation of natural gas in a volume up to and including 51,750,000,000 cubic feet per year.

- "(C) The exportation of natural gas to a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas.
- "(2) EXCLUSION.—Subparagraphs (B) and (C) of paragraph (1) shall not apply to any nation subject to sanctions imposed by the United States."

SEC. 1803. APPALACHIAN ENERGY FOR NATIONAL SECURITY.

- (a) STUDY ON BUILDING ETHANE AND OTHER NATURAL-GAS-LIQUIDS-RELATED PETRO-CHEMICAL INFRASTRUCTURE.—
- (1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Defense, the Secretary of the Treasury, and the heads of other relevant Federal departments and agencies and stakeholders, shall conduct a study assessing the potential national and economic security impacts of building ethane and other natural-gas-liquids-related petrochemical infrastructure in the geographical vicinity of the Marcellus, Utica, and Rogersville shale plays in the United States.
- (2) CONTENTS.—The study conducted under paragraph (1) shall include—
- (A) the identification of potential benefits of the proposed infrastructure to national and economic security, including the identification of potential risks to national and economic security of significant foreign ownership and control of United States domestic petrochemical resources; and
- (B) an examination of, with respect to the proposed infrastructure—
- (i) types of additional infrastructure needed to fully optimize the potential national security benefits:
- (ii) whether geopolitical diversity in areas to which the ethane and other natural gas liquids will be exported from the producing region would undermine or bolster national security:
- (iii) the necessity of evaluating the public interest with respect to exports of ethane, propane, butane, and other natural gas liquids, to ensure the potential strategic national and economic security benefits are preserved within the United States: and
- (iv) the potential benefits, with respect to significant weather impacts, compared to other regions, of locating the proposed infrastructure in the geographical vicinity of the Marcellus, Utica, and Rogersville shale plays.
 - (b) Reports.—
- (1) STATUS REPORTS.—Prior to completion of the study under subsection (a), the Committees on Energy and Natural Resources and Armed Services of the Senate and the Committees on Energy and Commerce and Armed Services of the House of Representatives, from time to time, may request and receive from the Secretary status reports with respect to the study, including any findings.
- (2) SUBMISSION AND PUBLICATION OF RE-PORT.—On completion of the study under subsection (a), the Secretary shall—
- (A) submit to the Committees on Energy and Natural Resources and Armed Services of the Senate and the Committees on Energy and Commerce and Armed Services of the House of Representatives a report describing the results of the study; and
- (B) publish the report on the website of the Department.

SEC. 1804. ENERGY AND WATER FOR SUSTAINABILITY.

- (a) NEXUS OF ENERGY AND WATER FOR SUSTAINABILITY.—
- (1) Definitions.—In this subsection:
- (A) ENERGY-WATER NEXUS.—The term "energy-water nexus" means the links between—
- (i) the water needed to produce fuels, electricity, and other forms of energy; and

- (ii) the energy needed to transport, reclaim, and treat water and wastewater.
- (B) INTERAGENCY COORDINATION COM-MITTEE.—The term "Interagency Coordination Committee" means the Committee on the Nexus of Energy and Water for Sustainability (or the "NEWS Committee") established under paragraph (2)(A).
- (C) NEXUS OF ENERGY AND WATER SUSTAIN-ABILITY OFFICE; NEWS OFFICE.—The term "Nexus of Energy and Water Sustainability Office" or the "NEWS Office" means an office located at the Department and managed in cooperation with the Department of the Interior pursuant to an agreement between the 2 agencies to carry out leadership and administrative functions for the Interagency Coordination Committee.
- (D) RD&D.—The term "RD&D" means research, development, and demonstration.
- (2) INTERAGENCY COORDINATION COM-
- (A) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary and the Secretary of the Interior shall establish the joint NEWS Office and Interagency Coordination Committee on the Nexus of Energy and Water for Sustainability (or the "NEWS Committee") to carry out the duties described in subparagraph (C).
 - (B) Administration.—
- (i) CHAIRS.—The Secretary and the Secretary of the Interior shall jointly manage the NEWS Office and serve as co-chairs of the Interagency Coordination Committee.
- (ii) MEMBERSHIP; STAFFING.—Membership and staffing shall be determined by the co-chairs.
- (C) DUTIES.—The Interagency Coordination Committee shall—
- (i) serve as a forum for developing common Federal goals and plans on energy-water nexus RD&D activities in coordination with the National Science and Technology Council:
- (ii) not later than 1 year after the date of enactment of this Act, and biennially thereafter, issue a strategic plan on energy-water nexus RD&D activities priorities and objectives:
- (iii) convene and promote coordination of the activities of Federal departments and agencies on energy-water nexus RD&D activities, including the activities of—
 - (I) the Department;
- (II) the Department of the Interior;
- (III) the Corps of Engineers;
- (IV) the Department of Agriculture;
- (V) the Department of Defense;
- (VI) the Department of State;
- (VII) the Environmental Protection Agency;
- (VIII) the Council on Environmental Quality;
- (IX) the National Institute of Standards and Technology;
- (X) the National Oceanic and Atmospheric Administration:
- (XI) the National Science Foundation;
- (XII) the Office of Management and Budget;
- (XIII) the Office of Science and Technology Policy;
- (XIV) the National Aeronautics and Space Administration; and
- (XV) such other Federal departments and agencies as the Interagency Coordination Committee considers appropriate;
- (iv)(I) coordinate and develop capabilities and methodologies for data collection, management, and dissemination of information related to energy-water nexus RD&D activities from and to other Federal departments and agencies; and
- (II) promote information exchange between Federal departments and agencies—
- (aa) to identify and document Federal and non-Federal programs and funding opportu-

- nities that support basic and applied RD&D proposals to advance energy-water nexus related science and technologies;
- (bb) to leverage existing programs by encouraging joint solicitations, block grants, and matching programs with non-Federal entities; and
- (cc) to identify opportunities for domestic and international public-private partnerships, innovative financing mechanisms, and information and data exchange;
- (v) promote the integration of energywater nexus considerations into existing Federal water, energy, and other natural resource, infrastructure, and science programs at the national and regional levels and with programs administered in partnership with non-Federal entities; and
- (vi) not later than 1 year after the date of enactment of this Act, issue a report on the potential benefits and feasibility of establishing an energy-water center of excellence within the National Laboratories.
- (D) NO REGULATION.—Nothing in this paragraph grants to the Interagency Coordination Committee the authority to promulgate regulations or set standards.
- (E) ADDITIONAL PARTICIPATION.—In developing the strategic plan described in subparagraph (C)(ii), the Secretary shall consult and coordinate with a diverse group of representatives from research and academic institutions, industry, public utility commissions, and State and local governments that have expertise in technologies and practices relating to the energy-water nexus.
- (F) REVIEW; REPORT.—At the end of the 5-year period beginning on the date on which the Interagency Coordination Committee and NEWS Office are established, the NEWS Office shall—
- (i) review the activities, relevance, and effectiveness of the Interagency Coordination Committee; and
- (ii) submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Science, Space, and Technology, Energy and Commerce, and Natural Resources of the House of Representatives a report that—
- (I) describes the results of the review conducted under clause (i): and
- (II) includes a recommendation on whether the Interagency Coordination Committee should continue.
- (3) CROSSCUT BUDGET.—Not later than 30 days after the President submits the budget of the United States Government under section 1105 of title 31. United States Code, the co-chairs of the Interagency Coordination Committee (acting through the NEWS Office) shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Science, Space, and Technology, Energy and Commerce, and Natural Resources of the House of Representatives, an interagency budget crosscut report that displays at the program-, project-, and activity-level for each of the Federal agencies that carry out or support (including through grants, contracts, interagency and intraagency transfers, and multiyear and noyear funds) basic and applied RD&D activities to advance the energy-water nexus related science and technologies-
- (A) the budget proposed in the budget request of the President for the upcoming fiscal year:
- $(\ensuremath{\overline{\mathbf{B}}})$ expenditures and obligations for the prior fiscal year; and
- (C) estimated expenditures and obligations for the current fiscal year.
 - (4) TERMINATION.—
- (A) IN GENERAL.—The authority provided to the NEWS Office and NEWS Committee under this subsection shall terminate on the date that is 7 years after the date of enactment of this Act.

- (B) EFFECT.—The termination of authority under subparagraph (A) shall not affect ongoing interagency planning, coordination, or other activities relating to the energy-water nexus.
- (b) INTEGRATING ENERGY AND WATER RESEARCH.—The Secretary shall integrate water considerations into energy research, development, and demonstration programs and projects of the Department by—
- (1) advancing energy and energy efficiency technologies and practices that meet the objectives of—
- (A) minimizing freshwater withdrawal and consumption:
- (B) increasing water use efficiency; and
- (C) utilizing nontraditional water sources; (2) considering the effects climate variability may have on water supplies and qual-
- bility may have on water supplies and quality for energy generation and fuel production; and
- (3) improving understanding of the energy-water nexus (as defined in subsection (a)(1)).
- (c) SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.—
- (1) IN GENERAL.—Subtitle A of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16191 et seq.) is amended by adding at the end the following:

"SEC. 918. SMART ENERGY AND WATER EFFI-CIENCY PILOT PROGRAM.

- "(a) DEFINITIONS.—In this section:
- "(1) ELIGIBLE ENTITY.—The term 'eligible entity' means—
- "(A) a utility:
- "(B) a municipality;
- "(C) a water district;
- ``(D) an Indian tribe or Alaska Native village; and
- "(E) any other authority that provides water, wastewater, or water reuse services.
- "(2) SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.—The term 'smart energy and water efficiency pilot program' or 'pilot program' means the pilot program established under subsection (b).
- "(b) SMART ENERGY AND WATER EFFICIENCY PILOT PROGRAM.—
- "(1) IN GENERAL.—The Secretary shall establish and carry out a smart energy and water efficiency pilot program in accordance with this section.
- "(2) PURPOSE.—The purpose of the smart energy and water efficiency pilot program is to award grants to eligible entities to demonstrate unique, advanced, or innovative technology-based solutions that will—
- "(A) improve the net energy balance of water, wastewater, and water reuse systems;
- "(B) improve the net energy balance of water, wastewater, and water reuse systems to help communities across the United States make measurable progress in conserving water, saving energy, and reducing costs:
- "(C) support the implementation of innovative and unique processes and the installation of established advanced automated systems that provide real-time data on energy and water; and
- "(D) improve energy-water conservation and quality and predictive maintenance through technologies that utilize internet connected technologies, including sensors, intelligent gateways, and security embedded in hardware.
- "(3) PROJECT SELECTION.—
- "(A) IN GENERAL.—The Secretary shall make competitive, merit-reviewed grants under the pilot program to not less than 3, but not more than 5, eligible entities.
- "(B) SELECTION CRITERIA.—In selecting an eligible entity to receive a grant under the pilot program, the Secretary shall consider—
 - "(i) energy and cost savings;
- "(ii) the uniqueness, commercial viability, and reliability of the technology to be used;

- "(iii) the degree to which the project integrates next-generation sensors software, analytics, and management tools;
- "(iv) the anticipated cost-effectiveness of the pilot project through measurable energy savings, water savings or reuse, and infrastructure costs averted:
- "(v) whether the technology can be deployed in a variety of geographic regions and the degree to which the technology can be implemented in a wide range of applications ranging in scale from small towns to large cities, including tribal communities;
- "(vi) whether the technology has been successfully deployed elsewhere;
- "(vii) whether the technology was sourced from a manufacturer based in the United States: and
- "(viii) whether the project will be completed in 5 years or less.
 - "(C) APPLICATIONS.—
- "(i) IN GENERAL.—Subject to clause (ii), an eligible entity seeking a grant under the pilot program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary determines to be necessary.
- "(ii) CONTENTS.—An application under clause (i) shall, at a minimum, include—
 - "(I) a description of the project;
- "(II) a description of the technology to be used in the project;
- "(III) the anticipated results, including energy and water savings, of the project;
- "(IV) a comprehensive budget for the project;
- "(V) the names of the project lead organi-
- zation and any partners;
 "(VI) the number of users to be served by
- the project;
 "(VII) a description of the ways in which
 the proposal would meet performance meas-
- ures established by the Secretary; and "(VIII) any other information that the Secretary determines to be necessary to complete the review and selection of a grant
 - "(4) Administration.—
- "(A) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary shall select grant recipients under this section.
- "(B) EVALUATIONS.—
- "(i) ANNUAL EVALUATIONS.—The Secretary shall annually carry out an evaluation of each project for which a grant is provided under this section that meets performance measures and benchmarks developed by the Secretary, consistent with the purposes of this section.
- "(ii) REQUIREMENTS.—Consistent with the performance measures and benchmarks developed under clause (i), in carrying out an evaluation under that clause, the Secretary shall—
- ``(I) evaluate the progress and impact of the project; and
- "(II) assesses the degree to which the project is meeting the goals of the pilot program.
- "(C) TECHNICAL AND POLICY ASSISTANCE.— On the request of a grant recipient, the Secretary shall provide technical and policy assistance.
- "(D) BEST PRACTICES.—The Secretary shall make available to the public through the Internet and other means the Secretary considers to be appropriate—
- "(i) a copy of each evaluation carried out under subparagraph (B); and
- "(ii) a description of any best practices identified by the Secretary as a result of those evaluations.
- "(E) REPORT TO CONGRESS.—The Secretary shall submit to Congress a report containing the results of each evaluation carried out under subparagraph (B).

- "(c) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out this section \$15,000,000, to remain available until expended."
- (2) CONFORMING AMENDMENT.—The table of contents of the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 594) is amended by inserting after the item relating to section 917 the following:
- "Sec. 918. Smart energy and water efficiency pilot program.".

SEC. 1805. TECHNOLOGY TRANSITIONS.

- (a) Office of Technology Transitions.— Section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391) is amended—
- (1) by striking subsection (a) and all that follows through "The Coordinator" in subsection (b) and inserting the following:
 - "(a) Office of Technology Transitions.-
- "(1) ESTABLISHMENT.—There is established within the Department an Office of Technology Transitions (referred to in this section as the 'Office').
- ''(2) MISSION.—The mission of the Office shall be— $\,$
- "(A) to expand the commercial impact of the research investments of the Department; and
- "(B) to focus on commercializing technologies that reduce greenhouse gas emissions and technologies that support other missions of the Department.
 - "(3) GOALS.—
- "(A) IN GENERAL.—In carrying out the mission and activities of the Office, the Chief Commercialization Officer appointed under paragraph (4) shall, with respect to commercialization activities, meet not less than two of the goals described in subparagraph (B) and, to the maximum extent practicable, meet all of the goals described in that subparagraph.
- "(B) GOALS DESCRIBED.—The goals referred to in subparagraph (A) are the following:
- "(i) Reduction of greenhouse gas emis-
- "(ii) Ensuring economic competitiveness.
- "(iii) Enhancement of domestic energy security and national security.
- "(iv) Enhancement of domestic jobs.
- "(v) Any other missions of the Department, as determined by the Secretary.
- "(4) CHIEF COMMERCIALIZATION OFFICER.—
- "(A) IN GENERAL.—The Office shall be headed by an officer, who shall be known as the 'Chief Commercialization Officer', and who shall report directly to, and be appointed by, the Secretary.
- "(B) PRINCIPAL ADVISOR.—The Chief Commercialization Officer shall be the principal advisor to the Secretary on all matters relating to technology transfer and commercialization.
- $\mbox{``(C)}$ QUALIFICATIONS.—The Chief Commercialization Officer'';
 - (2) in subsection (c)—
- (A) in paragraph (1), by striking "subsection (d)" and inserting "subsection (b)";
- (B) by redesignating paragraphs (1) through (4) as clauses (i) through (iv), respectively, and indenting appropriately; and
- (C) by striking the subsection designation and heading and all that follows through "The Coordinator" in the matter preceding clause (i) (as so redesignated) and inserting the following:
- "(D) DUTIES.—The Chief Commercialization Officer";
- (3) by adding at the end of subsection (a) (as amended by paragraph (2)(C)) the following:
- "(5) COORDINATION.—In carrying out the mission and activities of the Office, the Chief Commercialization Officer shall coordinate with the senior leadership of the Department, other relevant program offices of the

- Department, National Laboratories, the Technology Transfer Working Group established under subsection (b), the Technology Transfer Policy Board, and other stakeholders (including private industry)."
- (4) by redesignating subsections (d) through (h) as subsections (b) through (f), respectively; and
- (5) in subsection (f) (as so redesignated), by striking "subsection (e)" and inserting "subsection (c)".
- (b) REVIEW OF APPLIED ENERGY PROGRAMS.—
- (1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary shall conduct a review of all applied energy research and development programs under the Department that focus on researching and developing technologies that reduce emissions.
- (2) REQUIREMENTS.—In conducting the review under paragraph (1), the Secretary shall—
- (A) identify each program described in that paragraph the mission of which is to research and develop technologies that reduce emissions;
- (B) determine the type of services provided by each program identified under subparagraph (A), such as grants and technical assistance:
- (C) determine whether there are written program goals for each program identified under subparagraph (A);
- (D) examine the extent to which the programs identified under subparagraph (A) overlap or are duplicative; and
 - (E) develop recommendations-
- (i) as to how any overlapping or duplicative programs identified under subparagraph (D) should be restructured or consolidated, including by any necessary legislation;
- (ii) as to how to identify technologies described in subparagraph (A) that—
- (I) are not served by a single program office at the Department; or
- (II) the research and development of which may require collaboration with other Federal agencies; and
- (iii) for methods to improve the programs identified under subparagraph (A), including by establishing program goals, assessing workforce considerations and technical skills, or increasing collaboration with other Federal agencies and stakeholders (including private industry).
- (3) REPORT.—Not later than 60 days after the Secretary completes the review under paragraph (1), the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committees on Science, Space, and Technology and Energy and Commerce of the House of Representatives a report describing the results of and the recommendations developed under the review.

SEC. 1806. ENERGY TECHNOLOGY COMMERCIALIZATION FUND COST-SHARING.

Section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391) is amended in subsection (c) (as redesignated by section 1805(a)(4))—

- (1) in the subsection heading, by inserting "ENERGY" before "TECHNOLOGY"; and
- (2) by striking "matching funds with private partners" and inserting ", in accordance with the cost-sharing requirements under section 988, funds to private partners, including National Laboratories."

SEC. 1807. STATE LOAN ELIGIBILITY.

- (a) DEFINITIONS.—Section 1701 of the Energy Policy Act of 2005 (42 U.S.C. 16511) is amended by adding at the end the following:
- "(6) STATE.—The term 'State' has the meaning given the term in section 202 of the Energy Conservation and Production Act (42 U.S.C. 6802).

- "(7) STATE ENERGY FINANCING INSTITUTION.—
- "(A) IN GENERAL.—The term 'State energy financing institution' means a quasi-independent entity or an entity within a State agency or financing authority established by a State—
- "(i) to provide financing support or credit enhancements, including loan guarantees and loan loss reserves, for eligible projects; and
- "(ii) to create liquid markets for eligible projects, including warehousing and securitization, or take other steps to reduce financial barriers to the deployment of existing and new eligible projects.
- "(B) INCLUSION.—The term 'State energy financing institution' includes an entity or organization established to achieve the purposes described in clauses (i) and (ii) of subparagraph (A) by an Indian Tribal entity or an Alaska Native Corporation.".
- (b) TERMS AND CONDITIONS.—Section 1702 of the Energy Policy Act of 2005 (42 U.S.C. 16512) is amended—
- (1) in subsection (a), by inserting ", including projects receiving financial support or credit enhancements from a State energy financing institution," after "for projects";
- (2) in subsection (d)(1), by inserting ", including a guarantee for a project receiving financial support or credit enhancements from a State energy financing institution," after "No guarantee"; and
- (3) by adding at the end the following:
- "(1) STATE ENERGY FINANCING INSTITUTIONS.—
- "(1) ELIGIBILITY.—To be eligible for a guarantee under this title, a project receiving financial support or credit enhancements from a State energy financing institution—
- "(A) shall meet the requirements of section 1703(a)(1); and
- "(B) shall not be required to meet the requirements of section 1703(a)(2).
- "(2) Partnerships authorized.—In carrying out a project receiving a loan guarantee under this title, State energy financing institutions may enter into partnerships with private entities, Tribal entities, and Alaska Native corporations.
- "(3) Prohibition on use of appropriated to the Department before the date of enactment of this subsection shall not be available to be used for the cost of loan guarantees made to State energy financing institutions under this subsection."

SEC. 1808. ARPA-E REAUTHORIZATION.

- (a) GOALS.—Section 5012(c) of the America COMPETES Act (42 U.S.C. 16538(c)) is amended—
- (1) in paragraph (1), by striking subparagraph (A) and inserting the following:
- "(A) to enhance the economic and energy security of the United States through the development of energy technologies that—
- "(i) reduce imports of energy from foreign sources;
- "(ii) reduce energy-related emissions, including greenhouse gases;
- "(iii) improve the energy efficiency of all economic sectors; and
- "(iv) improve the resilience, reliability, and security of infrastructure to produce, deliver, and store energy; and"; and
- (2) in paragraph (2), in the matter preceding subparagraph (A), by striking "energy" and inserting "advanced".
- (b) RESPONSIBILITIES.—Section 5012(e)(3)(A) of the America COMPETES Act (42 U.S.C. 16538(e)(3)(A)) is amended by striking "energy".
- (c) AWARDS.—Section 5012(f) of the America COMPETES Act (42 U.S.C. 16538(f)) is amended—
- (1) by striking "In carrying" and inserting the following:

- "(1) IN GENERAL.—In carrying"; and
- (2) by adding at the end the following:
- "(2) Consideration of Prior Grants.—In awarding a grant under paragraph (1), the Director shall take into account the satisfactory completion of any project carried out by the entity applying for the grant using any prior grant funds awarded to that entity by the Director.".
- (d) REPORTS AND ROADMAPS.—Section 5012(h) of the America COMPETES Act (42 U.S.C. 16538(h)) is amended—
 - (1) in paragraph (1)-
- (A) by striking "describing projects" and inserting the following: "describing—
 - "(A) projects";
- (B) in subparagraph (A) (as so designated), by striking the period at the end and inserting ", including projects that examine topics and technologies closely relating to other activities funded by the Department;" and
 - (C) by adding at the end the following:
- "(B) an analysis of whether the Director is in compliance with subsection (i)(1)(A) in supporting projects that examine the topics and technologies described in subparagraph (A); and
- "(C) current, proposed, and planned projects to be carried out pursuant to subsection (e)(3)(D)."; and
 - (2) in paragraph (2)—
- (A) by striking "October 1, 2010, and October 1, 2013" and inserting "October 1, 2021, and every 4 years thereafter"; and
 - (B) by striking "3" and inserting "4".
- (e) COORDINATION AND NONDUPLICATION.— Section 5012(i)(1) of the America COMPETES Act (42 U.S.C. 16538(i)(1)) is amended—
- (1) by striking "that the activities" and inserting the following: "that—
 - "(A) the activities";
- (2) in subparagraph (A) (as so designated), by striking the period at the end and inserting "; and"; and
- (3) by adding at the end the following:
- "(B) an award is not provided for a project unless the prospective award recipient demonstrates that—
- "(i) the prospective award recipient has made a sufficient attempt to secure private financing, as determined by the Director: or
- "(ii) the project is not independently commercially viable."

 (f) EVALUATION.—Section 5012(1) of the
- (f) EVALUATION.—Section 5012(1) of the America COMPETES Act (42 U.S.C. 16538(1)) is amended—
- (1) in paragraph (1), by striking "After" and all that follows through "years" and inserting "Not later than 3 years after the date of enactment of the American Energy Innovation Act of 2020"; and
 - (2) in paragraph (2)—
- (A) in the matter preceding subparagraph (A), by striking "shall" and inserting "may"; and
- (B) in subparagraph (A), by striking "the recommendation of the National Academy of Sciences" and inserting "a recommendation".
- (g) AUTHORIZATION OF APPROPRIATIONS.— Section 5012(0)(2) of the America COMPETES Act (42 U.S.C. 16538(0)(2)) is amended—
- (1) in the matter preceding subparagraph (A), by striking "paragraphs (4) and (5)" and inserting "paragraph (4)"; and
- (2) by striking subparagraphs (A) through (E) and inserting the following:
 - ``(A) \$428,000,000 for fiscal year 2021;
- "(B) \$497,000,000 for fiscal year 2022;
- "(C) \$567,000,000 for fiscal year 2023;
- "(D) \$651,000,000 for fiscal year 2024; and
- "(E) \$750,000,000 for fiscal year 2025.".
- (h) TECHNICAL AMENDMENTS.—Section 5012 of the America COMPETES Act (42 U.S.C. 16538) is amended—
- (1) in subsection (g)(3)(A)(iii), by striking "subpart" each place it appears and inserting "subparagraph"; and

(2) in subsection (o)(4)(B), by striking "(o)(2)(D)" and inserting "(o)(2)(C)".

SEC. 1809. ADJUSTING STRATEGIC PETROLEUM RESERVE MANDATED DRAWDOWNS.

- (a) AMERICA'S WATER INFRASTRUCTURE ACT OF 2018.—Section 3009(a)(1) of the America's Water Infrastructure Act of 2018 (42 U.S.C. 6241 note; Public Law 115–270) is amended by striking "2028" and inserting "2030."
- (b) BIPARTISAN BUDGET ACT OF 2018.—Section 30204(a)(1) of the Bipartisan Budget Act of 2018 (42 U.S.C. 6241 note; Public Law 115—123) is amended—
- (1) in subparagraph (B), by striking "2026" and inserting "2029"; and
- (2) in subparagraph (C), by striking "2027" and inserting "2030".
- (c) RECONCILIATION ON THE BUDGET FOR 2018.—Section 20003(a)(1) of Public Law 115-97 (42 U.S.C. 6241 note) is amended by striking "2026 through 2027" and inserting "2029 through 2030."

SEC. 1810. WESTERN AREA POWER ADMINISTRA-TION PILOT PROJECT.

- (a) IN GENERAL.—Not later than 120 days after the date of enactment of this Act, the Administrator of the Western Area Power Administration (referred to in this section as the "Administrator") shall—
- (1) establish a pilot project, as part of the continuous process improvement program and to provide increased transparency for customers—
- (A) to make available a database of information relating to the Western Area Power Administration in accordance with paragraph (2); and
- (B) to provide annual updates to the database in accordance with subsection (b); and
- (2) publish on a publicly available website of the Western Area Power Administration, a database of the following information, beginning with fiscal year 2008, relating to the Western Area Power Administration:
- (A) By power system and in a consistent format, rates charged to customers for power and transmission service.
- (B) By power system, the amount of capacity or energy sold.
- (C) By region, an accounting, at the task level, budget activity level, organizational code level, and object class level, of all expenditures, including—
- (i) indirect costs, including overhead costs;
- (ii) direct charges and direct allocations;
- (iii) costs related to contract staff;
- (iv) costs related to independent consultants;
- (v) the number of full-time equivalents;
- (vi) charges to the region from the headquarters office of the Western Area Power Administration for all annual and capital costs: and
- (vii) expenses incurred on behalf of other Federal agencies or programs or third parties for the administration of programs not related to the marketing, transmission, or wheeling of Federal hydropower resources within the Western Area Power Administration marketing area, including—
 - (I) indirect costs, including overhead costs;
- (II) direct charges and allocations;
- (III) costs related to contract staff; and (IV) the number of full-time equivalents.
- (D) For the headquarters office of the Western Area Power Administration, an accounting, at the task level, budget activity level, organizational code level, and object class level, of all expenditures, including—
 - (i) indirect costs, including overhead costs;
 - (ii) direct charges and direct allocations;
 - ${\rm (iii)}\ costs\ related\ to\ contract\ staff;}$
- (iv) costs related to independent consultants;
- (v) the number of full-time equivalents;
- (vi) a summary of any expenditures described in this paragraph, with the total

amount paid by each region and power system: and

- (vii) expenses incurred on behalf of other Federal agencies or programs or third parties for the administration of programs not related to the marketing, transmission, or wheeling of Federal hydropower resources within the Western Area Power Administration marketing area, including—
 - (I) indirect costs, including overhead costs;
 - (II) direct charges and allocations;
 - (III) costs related to contract staff; and
 - (IV) the number of full-time equivalents.
- (E) Capital expenditures for each project, including—
- (i) capital investments delineated by the year in which each investment is placed into service; and
- (ii) the sources of capital for each investment.
- (b) Annual Summary.—
- (1) IN GENERAL.—Not later than 120 days after the end of each fiscal year in which the pilot project is being carried out under this section, the Administrator shall make available on a publicly available website—
- (A) updates to documents made available on the date of the initial publication of the information on the website under subsection (a)(2):
- (B) an identification of the annual changes in the information published on the website under subsection (a)(2);
- (C) the reasons for the changes identified under subparagraph (B);
- (D) subject to paragraph (2), the total amount of the unobligated balances retained by the Western Area Power Administration at the end of the prior fiscal year within each project and headquarters by—
 - (i) purpose or function;
 - (ii) source of funding;
 - (iii) anticipated program allotment; and
- (iv) underlying authority for each source of
- (E) The anticipated level of unobligated balances that the Western Area Power Administration expects to retain at the end of the fiscal year in which the annual summary is published, as delineated by each of the categories described in clauses (i) through (iv) of subparagraph (D).
- (2) LIMITATION.—Amounts in the Upper Colorado River Basin Fund established by section 5(a) of the Act of April 11, 1956 (commonly known as the "Colorado River Storage Project Act") (43 U.S.C. 620d(a)), shall not be considered to be an unobligated balance retained by the Western Area Power Administration for purposes of paragraph (1)(D).
- (c) TERMINATION.—The pilot project under this section shall terminate on the date that is 7 years after the date of enactment of this Act.

SEC. 1811. TIMING FOR DISTRIBUTION OF FINAN-CIAL ASSISTANCE UNDER THE STATE ENERGY PROGRAM.

Section 363 of the Energy Policy and Conservation Act (42 U.S.C. 6323) is amended by adding at the end the following:

"(g) TIMING FOR DISTRIBUTION OF FINANCIAL ASSISTANCE.—Notwithstanding any other provision of law (including regulations), not later than 60 days after the date on which funds have been made available to provide financial assistance under this section, the Secretary shall distribute to the applicable State the full amount of assistance to be provided to the State under this section for the fiscal year.".

SEC. 1812. ESTABLISHED PROGRAM TO STIMU-LATE COMPETITIVE RESEARCH.

Section 2203(b) of the Energy Policy Act of 1992 (42 U.S.C. 13503(b)) is amended by striking paragraph (3) and inserting the following:

``(3) ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH.—

- "(A) DEFINITIONS.—In this paragraph:
- "(i) ELIGIBLE ENTITY.—The term 'eligible entity' means an institution of higher education located in an eligible jurisdiction.
- "(ii) ELIGIBLE JURISDICTION.—The term 'eligible jurisdiction' means a State that, as determined by the Secretary—
- $\lq\lq(I)(aa)$ historically has received relatively little Federal research and development funding; and
 - "(bb) has demonstrated a commitment—
- ``(AA) to develop the research bases in the State; and
- "(BB) to improve science and engineering research and education programs at institutions of higher education in the State; and
- "(II) is an eligible jurisdiction under the criteria used by the Secretary to make awards under this paragraph on the day before the date of enactment of the American Energy Innovation Act of 2020.
- "(iii) EPSCOR.—The term 'EPSCOR' means the Established Program to Stimulate Competitive Research operated under subparagraph (B).
- "(iv) NATIONAL LABORATORY.—The term 'National Laboratory' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).
- "(v) STATE.—The term 'State' means—
- "(I) a State:
- "(II) the District of Columbia:
- "(III) the Commonwealth of Puerto Rico;
- "(IV) Guam;
- "(V) the United States Virgin Islands;
- "(VI) American Samoa; and
- "(VII) the Commonwealth of the Northern Mariana Islands.
- "(B) PROGRAM OPERATION.—The Secretary shall operate an Established Program to Stimulate Competitive Research.
- "(C) OBJECTIVES.—The objectives of EPSCoR shall be—
- "(i) to increase the number of researchers at institutions of higher education in eligible jurisdictions capable of performing nationally competitive science and engineering research in support of the mission of the Department of Energy in the areas of applied energy research, environmental management, and basic science;
- "(ii) to enhance the capabilities of institutions of higher education in eligible jurisdictions to develop, plan, and execute research that is competitive in the peer-review process; and
- "(iii) to increase the probability of longterm growth of competitive funding to institutions of higher education in eligible jurisdictions.
- "(D) Grants in areas of applied energy research, environmental management, and basic science.—
- "(i) IN GENERAL.—EPSCOR shall make grants to eligible entities to carry out and support applied energy research and research in all areas of environmental management and basic science sponsored by the Department of Energy, including—
- "(I) energy efficiency, fossil energy, renewable energy, and other applied energy research;
 - "(II) electricity delivery research;
- $\lq\lq(\mathrm{III})$ cybersecurity, energy security, and emergency response;
- "(IV) environmental management; and
- "(V) basic science research.
- "(ii) ACTIVITIES.—EPSCOR may make grants under this subparagraph for any activities consistent with the objectives described in subparagraph (C) in the areas of applied energy research, environmental management, and basic science described in clause (i), including—
- "(I) to support research at eligible entities that is carried out in partnership with the National Laboratories;
 - "(II) to provide for graduate traineeships;

- "(III) to support research by early career faculty; and
- "(IV) to improve research capabilities at eligible entities through biennial implementation grants.
- "(iii) No COST SHARING.—EPSCOR shall not impose any cost-sharing requirement with respect to a grant made under this subparagraph.
- "(E) OTHER ACTIVITIES.—EPSCOR may carry out such activities as may be necessary to meet the objectives described in subparagraph (C) in the areas of applied energy research, environmental management, and basic science described in subparagraph (D)(i).
 - "(F) PROGRAM IMPLEMENTATION.-
- "(i) IN GENERAL.—Not later than 270 days after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Energy and Commerce and Appropriations of the House of Representatives a plan describing how the Secretary shall implement EPSCOR.
- "(ii) CONTENTS OF PLAN.—The plan described in clause (i) shall include a description of—
- "(I) the management structure of EPSCoR, which shall ensure that all research areas and activities described in this paragraph are incorporated into EPSCoR;
- "(II) efforts to conduct outreach to inform eligible entities and faculty of changes to, and opportunities under, EPSCoR:
- "(III) how EPSCoR plans to increase engagement with eligible entities, faculty, and State committees, including by holding regular workshops, to increase participation in EPSCoR; and
- "(IV) any other issues relating to EPSCoR that the Secretary determines appropriate.
 - "(G) PROGRAM EVALUATION.—
- "(i) IN GENERAL.—Not later than 5 years after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall contract with a federally funded research and development center, the National Academy of Sciences, or a similar organization to carry out an assessment of the effectiveness of EPSCoR, including an assessment of—
- "(I) the tangible progress made towards achieving the objectives described in sub-paragraph (C);
- "(II) the impact of research supported by EPSCoR on the mission of the Department of Energy; and
- "(III) any other issues relating to EPSCoR that the Secretary determines appropriate.
- "(ii) LIMITATION.—The organization with which the Secretary contracts under clause (i) shall not be a National Laboratory.
- "(iii) REPORT.—Not later than 6 years after the date of enactment of the American Energy Innovation Act of 2020, the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Energy and Commerce and Appropriations of the House of Representatives a report describing the results of the assessment carried out under clause (i), including recommendations for improvements that would enable the Secretary to achieve the objectives described in subparagraph (C).".

SEC. 1813. BAKKEN AND THREE FORKS NATURAL GAS LIQUIDS REPORT.

(a) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary shall submit to the appropriate committees of Congress a report that assesses the feasibility of establishing a storage and distribution hub for natural gas liquids or any natural gas liquids component (including propane) in the vicinity of the Bakken and Three Forks shale plays in order

- to address supply chain constraints in the Midwest and other opportunities as a result of the increased production of natural gas liquids from shale developments.
- (b) COMPONENTS.—The report submitted under subsection (a) shall include, with respect to the proposed storage and distribution hub, an examination of-
 - (1) potential locations;
 - (2) economic feasibility;
- (3) geologic and aboveground storage capabilities;
 - (4) infrastructure needs; and
- (5) any economic benefits or benefits to energy security.

SEC. 1814. WIND BLADE RECYCLING PRIZE COM-PETITION.

- (a) IN GENERAL.—The Secretary shall establish an award program, to be known as the "Wind Blade Recycling Prize Competition" (referred to in this section as the "program"), under which the Secretary shall carry out prize competitions and make awards to advance the recycling of wind blade materials.
- (b) FREQUENCY.—To the maximum extent practicable, the Secretary shall carry out a competition under the program not less frequently than once every calendar year.
 - (c) ELIGIBILITY .-
- (1) IN GENERAL.—To be eligible to win a prize under the program, an individual or en-
- (A) shall have complied with the requirements of the competition as described in the announcement for that competition published in the Federal Register by the Secretary under subsection (f);
- (B) in the case of a private entity, shall be incorporated in the United States and maintain a primary place of business in the United States; and
- (C) in the case of an individual, whether participating singly or in a group, shall be a citizen of, or an alien lawfully admitted for permanent residence in, the United States.
- (2) EXCLUSIONS.—The following entities and individuals shall not be eligible to win a prize under the program:
 - (A) A Federal entity.
- (B) A Federal employee (including an employee of a National Laboratory) acting within the scope of employment.
- (d) AWARDS.—In carrying out the program, the Secretary shall award cash prizes, in amounts to be determined by the Secretary. to each individual or entity selected through a competitive process to develop methods or technologies to recycle or reuse wind blade materials from domestic wind energy facilities.
 - (e) CRITERIA.—
- (1) IN GENERAL.—The Secretary shall estabobjective, merit-based criteria for awarding the prizes in each competition carried out under the program.
- (2) REQUIREMENTS.—The criteria lished under paragraph (1) shall prioritize advancements in methods or technologies that present the greatest potential for large-scale commercial deployment.
- (3) CONSULTATION.—In establishing criteria under paragraph (1), the Secretary shall consult with appropriate members of private industry involved in the commercial deployment of wind energy facilities.
- (f) ADVERTISING AND SOLICITATION OF COM-PETITORS.-
- (1) IN GENERAL.—The Secretary shall announce each prize competition under the program by publishing a notice in the Federal Register.
- (2) REQUIREMENTS.—Each notice published under paragraph (1) shall describe the essential elements of the competition, such as-
 - (A) the subject of the competition;
 - (B) the duration of the competition;
- (C) the eligibility requirements for participation in the competition;

- (D) the process for participants to register for the competition;
 - (E) the amount of the prize; and
- (F) the criteria for awarding the prize.
- (g) JUDGES.
- (1) IN GENERAL.—For each prize competition under the program, the Secretary shall assemble a panel of qualified judges to select the winner or winners of the competition on the basis of the criteria established under subsection (e).
- (2) SELECTION.—The judges for each competition shall include appropriate members of private industry involved in the commerproduction and deployment of wind
- (3) CONFLICTS.—An individual may not serve as a judge in a prize competition under the program if the individual, the spouse of the individual, any child of the individual, or any other member of the household of the individual-
- (A) has a personal or financial interest in, or is an employee, officer, director, or agent of, any entity that is a registered participant in the prize competition for which the individual will serve as a judge; or
- (B) has a familial or financial relationship with a registered participant in the prize competition for which the individual will serve as a judge.
- (h) REPORT TO CONGRESS.—Not later than 60 days after the date on which the first prize is awarded under the program, and annually thereafter, the Secretary shall submit to Congress a report that-
 - (1) identifies each award recipient:
- (2) describes the advanced methods or technologies developed by each award recipient:
- (3) specifies actions being taken by the Department toward commercial application of all methods or technologies with respect to which a prize has been awarded under the program.
- (i) ANTI-DEFICIENCY ACT.—The Secretary shall carry out the program in accordance with section 1341 of title 31, United States Code (commonly referred to as the "Anti-Deficiency Act").
- (j) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$2,000,000, to remain available until expended.

TITLE II—SUPPLY CHAIN SECURITY Subtitle A—Mineral Security

SEC. 2101. MINERAL SECURITY.

- (a) DEFINITIONS.—In this section:
- "byproduct" (1) BYPRODUCT.—The term means a critical mineral-
- (A) the recovery of which depends on the production of a host mineral that is not designated as a critical mineral: and
- (B) that exists in sufficient quantities to be recovered during processing or refining.
 - (2) Critical Mineral.
- (A) IN GENERAL.—The term "critical minmeans any mineral, element, suberal' stance, or material designated as critical by the Secretary under subsection (c).
- (B) EXCLUSIONS.—The term "critical mineral" does not include-
- (i) fuel minerals, including oil, natural gas, or any other fossil fuels; or
- (ii) water, ice, or snow.
- (3) INDIAN TRIBE.—The term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).
- SECRETARY.—The term "Secretary" means the Secretary of the Interior.
- (5) STATE.—The term "State" means-
- (A) a State:
- (B) the District of Columbia:
- (C) the Commonwealth of Puerto Rico;
- (D) Guam;
- (E) American Samoa;

- (F) the Commonwealth of the Northern Mariana Islands; and
 - (G) the United States Virgin Islands.
 - (b) Policy.
- (1) IN GENERAL.—Section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602) is amended in the second sentence-
- (A) by striking paragraph (3) and inserting the following:
- "(3) establish an analytical and forecasting capability for identifying critical mineral demand, supply, and other factors to allow informed actions to be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts:":
- (B) in paragraph (6), by striking "and" after the semicolon at the end; and
- (C) by striking paragraph (7) and inserting the following:
- "(7) facilitate the availability development, and environmentally responsible production of domestic resources to meet national material or critical mineral needs:
- '(8) avoid duplication of effort, prevent unnecessary paperwork, and minimize delays in the administration of applicable laws (including regulations) and the issuance of permits and authorizations necessary to explore for, develop, and produce critical minerals and to construct critical mineral manufacturing facilities in accordance with applicable environmental and land management laws:
 - "(9) strengthen—
- "(A) educational and research capabilities at not lower than the secondary school level: and
- "(B) workforce training for exploration and development of critical minerals and critical mineral manufacturing:
- "(10) bolster international cooperation through technology transfer, information sharing, and other means:
- "(11) promote the efficient production, use, and recycling of critical minerals:
- "(12) develop alternatives to critical minerals: and
- "(13) establish contingencies for the production of, or access to, critical minerals for which viable sources do not exist within the United States."
- (2) CONFORMING AMENDMENT —Section 2(b) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1601(b)) is amended by striking "(b) As used in this Act, the term" and inserting the following:
 - "(b) DEFINITIONS.—In this Act:
- "(1) CRITICAL MINERAL.—The term 'critical mineral' means any mineral, element, substance, or material designated as critical by the Secretary under section 2101(c) of the American Energy Innovation Act of 2020.
 - "(2) MATERIALS.—The term"
 - (c) Critical Mineral Designations.-
- (1) DRAFT METHODOLOGY AND LIST.—The Secretary, acting through the Director of the United States Geological Survey (referred to in this subsection as the "Secretary"), shall publish in the Federal Register for public comment-
- (A) a description of the draft methodology used to identify a draft list of critical minerals;
- (B) a draft list of minerals, elements, substances, and materials that qualify as critical minerals; and
- (C) a draft list of critical minerals recovered as byproducts.
- (2) AVAILABILITY OF DATA.—If available data is insufficient to provide a quantitative basis for the methodology developed under this subsection, qualitative evidence may be used to the extent necessary.
- (3) FINAL METHODOLOGY AND LIST.—After reviewing public comments on the draft

methodology and the draft lists published under paragraph (1) and updating the methodology and lists as appropriate, not later than 45 days after the date on which the public comment period with respect to the draft methodology and draft lists closes, the Secretary shall publish in the Federal Register—

- (A) a description of the final methodology for determining which minerals, elements, substances, and materials qualify as critical minerals:
 - (B) the final list of critical minerals; and
- (C) the final list of critical minerals recovered as byproducts.
 - (4) Designations.—
- (A) IN GENERAL.—For purposes of carrying out this subsection, the Secretary shall maintain a list of minerals, elements, substances, and materials designated as critical, pursuant to the final methodology published under paragraph (3), that the Secretary determines—
- (i) are essential to the economic or national security of the United States;
- (ii) the supply chain of which is vulnerable to disruption (including restrictions associated with foreign political risk, abrupt demand growth, military conflict, violent unrest, anti-competitive or protectionist behaviors, and other risks throughout the supply chain); and
- (iii) serve an essential function in the manufacturing of a product (including energy technology-, defense-, currency-, agriculture-, consumer electronics-, and health care-related applications), the absence of which would have significant consequences for the economic or national security of the United States.
- (B) INCLUSIONS.—Notwithstanding the criteria under paragraph (3), the Secretary may designate and include on the list any mineral, element, substance, or material determined by another Federal agency to be strategic and critical to the defense or national security of the United States.
- (C) REQUIRED CONSULTATION.—The Secretary shall consult with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative in designating minerals, elements, substances, and materials as critical under this paragraph.
 - (5) Subsequent review.—
- (A) IN GENERAL.—The Secretary, in consultation with the Secretaries of Defense, Commerce, Agriculture, and Energy and the United States Trade Representative, shall review the methodology and list under paragraph (3) and the designations under paragraph (4) at least every 3 years, or more frequently as the Secretary considers to be appropriate.
- (B) REVISIONS.—Subject to paragraph (4)(A), the Secretary may—
- (i) revise the methodology described in this subsection;
- (ii) determine that minerals, elements, substances, and materials previously determined to be critical minerals are no longer critical minerals; and
- (iii) designate additional minerals, elements, substances, or materials as critical minerals.
- (6) NOTICE.—On finalization of the methodology and the list under paragraph (3), or any revision to the methodology or list under paragraph (5), the Secretary shall submit to Congress written notice of the action.
- (d) RESOURCE ASSESSMENT.—
- (1) IN GENERAL.—Not later than 4 years after the date of enactment of this Act, in consultation with applicable State (including geological surveys), local, academic, industry, and other entities, the Secretary (acting through the Director of the United States Geological Survey) or a designee of

the Secretary, shall complete a comprehensive national assessment of each critical mineral that—

- (A) identifies and quantifies known critical mineral resources, using all available public and private information and datasets, including exploration histories; and
- (B) provides a quantitative and qualitative assessment of undiscovered critical mineral resources throughout the United States, including probability estimates of tonnage and grade, using all available public and private information and datasets, including exploration histories.
- (2) SUPPLEMENTARY INFORMATION.—In carrying out this subsection, the Secretary may carry out surveys and field work (including drilling, remote sensing, geophysical surveys, topographical and geological mapping, and geochemical sampling and analysis) to supplement existing information and datasets available for determining the existence of critical minerals in the United States.
- (3) PUBLIC ACCESS.—Subject to applicable law, to the maximum extent practicable, the Secretary shall make all data and metadata collected from the comprehensive national assessment carried out under paragraph (1) publically and electronically accessible.
- (4) TECHNICAL ASSISTANCE.—At the request of the Governor of a State or the head of an Indian tribe, the Secretary may provide technical assistance to State governments and Indian tribes conducting critical mineral resource assessments on non-Federal land.
 - (5) Prioritization.—
- (A) IN GENERAL.—The Secretary may sequence the completion of resource assessments for each critical mineral such that critical minerals considered to be most critical under the methodology established under subsection (c) are completed first.
- (B) REPORTING.—During the period beginning not later than 1 year after the date of enactment of this Act and ending on the date of completion of all of the assessments required under this subsection, the Secretary shall submit to Congress on an annual basis an interim report that—
- (i) identifies the sequence and schedule for completion of the assessments if the Secretary sequences the assessments; or
- (ii) describes the progress of the assessments if the Secretary does not sequence the assessments.
- (6) UPDATES.—The Secretary may periodically update the assessments conducted under this subsection based on—
- (A) the generation of new information or datasets by the Federal Government; or
- (B) the receipt of new information or datasets from critical mineral producers, State geological surveys, academic institutions, trade associations, or other persons.
- (7) ADDITIONAL SURVEYS.—The Secretary shall complete a resource assessment for each additional mineral or element subsequently designated as a critical mineral under subsection (c)(5)(B) not later than 2 years after the designation of the mineral or element.
- (8) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the status of geological surveying of Federal land for any mineral commodity—
- (A) for which the United States was dependent on a foreign country for more than 25 percent of the United States supply, as depicted in the report issued by the United States Geological Survey entitled "Mineral Commodity Summaries 2020"; but
- (B) that is not designated as a critical mineral under subsection (c).
 - (e) Permitting.—
- (1) SENSE OF CONGRESS.—It is the sense of Congress that—

- (A) critical minerals are fundamental to the economy, competitiveness, and security of the United States:
- (B) to the maximum extent practicable, the critical mineral needs of the United States should be satisfied by minerals responsibly produced and recycled in the United States; and
- (C) the Federal permitting process has been identified as an impediment to mineral production and the mineral security of the United States.
- (2) PERFORMANCE IMPROVEMENTS.—To improve the quality and timeliness of decisions, the Secretary (acting through the Director of the Bureau of Land Management) and the Secretary of Agriculture (acting through the Chief of the Forest Service) (referred to in this subsection as the "Secretaries") shall, to the maximum extent practicable, with respect to critical mineral production on Federal land, complete Federal permitting and review processes with maximum efficiency and effectiveness, while supporting vital economic growth, by—
- (A) establishing and adhering to timelines and schedules for the consideration of, and final decisions regarding, applications, operating plans, leases, licenses, permits, and other use authorizations for mineral-related activities on Federal land:
- (B) establishing clear, quantifiable, and temporal permitting performance goals and tracking progress against those goals;
- (C) engaging in early collaboration among agencies, project sponsors, and affected stakeholders—
- (i) to incorporate and address the interests of those parties; and
 - (ii) to minimize delays;
- (D) ensuring transparency and accountability by using cost-effective information technology to collect and disseminate information regarding individual projects and agency performance;
- (E) engaging in early and active consultation with State, local, and Indian tribal governments to avoid conflicts or duplication of effort, resolve concerns, and allow for concurrent, rather than sequential, reviews;
- (F) providing demonstrable improvements in the performance of Federal permitting and review processes, including lower costs and more timely decisions;
- (G) expanding and institutionalizing permitting and review process improvements that have proven effective;
- (H) developing mechanisms to better communicate priorities and resolve disputes among agencies at the national, regional, State, and local levels; and
- (I) developing other practices, such as preapplication procedures.
- (3) REVIEW AND REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretaries shall submit to Congress a report that—
- (A) identifies additional measures (including regulatory and legislative proposals, as appropriate) that would increase the timeliness of permitting activities for the exploration and development of domestic critical minerals;
- (B) identifies options (including cost recovery paid by permit applicants) for ensuring adequate staffing and training of Federal entities and personnel responsible for the consideration of applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land:
- (C) quantifies the amount of time typically required (including range derived from minimum and maximum durations, mean, median, variance, and other statistical measures or representations) to complete each step (including those aspects outside the

- control of the executive branch, such as judicial review, applicant decisions, or State and local government involvement) associated with the development and processing of applications, operating plans, leases, licenses, permits, and other use authorizations for critical mineral-related activities on Federal land, which shall serve as a baseline for the performance metric under paragraph (4); and
- (D) describes actions carried out pursuant to paragraph (2).
- (4) PERFORMANCE METRIC.—Not later than 90 days after the date of submission of the report under paragraph (3), the Secretaries, after providing public notice and an opportunity to comment, shall develop and publish a performance metric for evaluating the progress made by the executive branch to expedite the permitting of activities that will increase exploration for, and development of, domestic critical minerals, while maintaining environmental standards.
- (5) ANNUAL REPORTS.—Beginning with the first budget submission by the President under section 1105 of title 31, United States Code, after publication of the performance metric required under paragraph (4), and annually thereafter, the Secretaries shall submit to Congress a report that—
- (A) summarizes the implementation of recommendations, measures, and options identified in subparagraphs (A) and (B) of paragraph (3);
- (B) using the performance metric under paragraph (4), describes progress made by the executive branch, as compared to the baseline established pursuant to paragraph (3)(C), on expediting the permitting of activities that will increase exploration for, and development of, domestic critical minerals; and
- (C) compares the United States to other countries in terms of permitting efficiency and any other criteria relevant to the globally competitive critical minerals industry.
- (6) INDIVIDUAL PROJECTS.—Using data from the Secretaries generated under paragraph (5), the Director of the Office of Management and Budget shall prioritize inclusion of individual critical mineral projects on the website operated by the Office of Management and Budget in accordance with section 1122 of title 31. United States Code.
- (7) REPORT OF SMALL BUSINESS ADMINISTRATION.—Not later than 1 year and 300 days after the date of enactment of this Act, the Administrator of the Small Business Administration shall submit to the applicable committees of Congress a report that assesses the performance of Federal agencies with respect to—
- (A) complying with chapter 6 of title 5, United States Code (commonly known as the "Regulatory Flexibility Act"), in promulgating regulations applicable to the critical minerals industry; and
- (B) performing an analysis of regulations applicable to the critical minerals industry that may be outmoded, inefficient, duplicative, or excessively burdensome.
 - (f) FEDERAL REGISTER PROCESS.—
- (1) DEPARTMENTAL REVIEW.—Absent any extraordinary circumstance, and except as otherwise required by law, the Secretary and the Secretary of Agriculture shall ensure that each Federal Register notice described in paragraph (2) shall be—
- (A) subject to any required reviews within the Department of the Interior or the Department of Agriculture; and
- (B) published in final form in the Federal Register not later than 45 days after the date of initial preparation of the notice.
- (2) PREPARATION.—The preparation of Federal Register notices required by law associated with the issuance of a critical mineral exploration or mine permit shall be delegated to the organizational level within the

- agency responsible for issuing the critical mineral exploration or mine permit.
- (3) Transmission.—All Federal Register notices regarding official document availability, announcements of meetings, or notices of intent to undertake an action shall be originated in, and transmitted to the Federal Register from, the office in which, as applicable—
 - $(\ensuremath{\mathrm{A}})$ the documents or meetings are held; or
 - (B) the activity is initiated.
- (g) RECYCLING, EFFICIENCY, AND ALTERNATIVES.—
- (1) ESTABLISHMENT.—The Secretary of Energy (referred to in this subsection as the "Secretary") shall conduct a program of research and development—
- (A) to promote the efficient production, use, and recycling of critical minerals throughout the supply chain; and
- (B) to develop alternatives to critical minerals that do not occur in significant abundance in the United States.
- (2) COOPERATION.—In carrying out the program, the Secretary shall cooperate with appropriate—
- (A) Federal agencies and National Laboratories:
 - (B) critical mineral producers;
 - (C) critical mineral processors;
 - (D) critical mineral manufacturers;
- (E) trade associations;
- (F) academic institutions;
- (G) small businesses; and
- (H) other relevant entities or individuals.
- (3) ACTIVITIES.—Under the program, the Secretary shall carry out activities that include the identification and development of—
- (A) advanced critical mineral extraction, production, separation, alloying, or processing technologies that decrease the energy consumption, environmental impact, and costs of those activities, including—
- (i) efficient water and wastewater management strategies:
- (ii) technologies and management strategies to control the environmental impacts of radionuclides in ore tailings:
- (iii) technologies for separation and processing; and
- (iv) technologies for increasing the recovery rates of byproducts from host metal ores;
- (B) technologies or process improvements that minimize the use, or lead to more efficient use, of critical minerals across the full supply chain:
- (C) technologies, process improvements, or design optimizations that facilitate the recycling of critical minerals, and options for improving the rates of collection of products and scrap containing critical minerals from post-consumer, industrial, or other waste streams;
- (D) commercial markets, advanced storage methods, energy applications, and other beneficial uses of critical minerals processing byproducts;
- (E) alternative minerals, metals, and materials, particularly those available in abundance within the United States and not subject to potential supply restrictions, that lessen the need for critical minerals; and
- (F) alternative energy technologies or alternative designs of existing energy technologies, particularly those that use minerals that—
- $\mbox{(i)}$ occur in abundance in the United States; and
- (ii) are not subject to potential supply restrictions.
- (4) REPORTS.—Not later than 2 years after the date of enactment of this Act, and annually thereafter, the Secretary shall submit to Congress a report summarizing the activities, findings, and progress of the program.
 - (h) ANALYSIS AND FORECASTING.—

- (1) Capabilities.—In order to evaluate existing critical mineral policies and inform future actions that may be taken to avoid supply shortages, mitigate price volatility, and prepare for demand growth and other market shifts, the Secretary (acting through the Director of the United States Geological Survey) or a designee of the Secretary, in consultation with the Energy Information Administration, academic institutions, and others in order to maximize the application of existing competencies related to developing and maintaining computer-models and similar analytical tools, shall conduct and publish the results of an annual report that includes-
- (A) as part of the annually published Mineral Commodity Summaries from the United States Geological Survey, a comprehensive review of critical mineral production, consumption, and recycling patterns, including—
- (i) the quantity of each critical mineral domestically produced during the preceding year;
- (ii) the quantity of each critical mineral domestically consumed during the preceding year;
- (iii) market price data or other price data for each critical mineral:
 - (iv) an assessment of-
- (I) critical mineral requirements to meet the national security, energy, economic, industrial, technological, and other needs of the United States during the preceding year;
- (II) the reliance of the United States on foreign sources to meet those needs during the preceding year; and
- (III) the implications of any supply shortages, restrictions, or disruptions during the preceding year;
- (v) the quantity of each critical mineral domestically recycled during the preceding year:
- (vi) the market penetration during the preceding year of alternatives to each critical mineral:
- (vii) a discussion of international trends associated with the discovery, production, consumption, use, costs of production, prices, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and
- (viii) such other data, analyses, and evaluations as the Secretary finds are necessary to achieve the purposes of this subsection; and
- (B) a comprehensive forecast, entitled the "Annual Critical Minerals Outlook", of projected critical mineral production, consumption, and recycling patterns, including—
- (i) the quantity of each critical mineral projected to be domestically produced over the subsequent 1-year, 5-year, and 10-year periods:
- (ii) the quantity of each critical mineral projected to be domestically consumed over the subsequent 1-year, 5-year, and 10-year periods:
 - (iii) an assessment of-
- (I) critical mineral requirements to meet projected national security, energy, economic, industrial, technological, and other needs of the United States;
- (II) the projected reliance of the United States on foreign sources to meet those needs; and
- (III) the projected implications of potential supply shortages, restrictions, or disruptions;
- (iv) the quantity of each critical mineral projected to be domestically recycled over the subsequent 1-year, 5-year, and 10-year periods:
- (v) the market penetration of alternatives to each critical mineral projected to take place over the subsequent 1-year, 5-year, and 10-year periods;

- (vi) a discussion of reasonably foreseeable international trends associated with the discovery, production, consumption, use, costs of production, and recycling of each critical mineral as well as the development of alternatives to critical minerals; and
- (vii) such other projections relating to each critical mineral as the Secretary determines to be necessary to achieve the purposes of this subsection.
- (2) PROPRIETARY INFORMATION.—In preparing a report described in paragraph (1), the Secretary shall ensure, consistent with section 5(f) of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1604(f)), that—
- (A) no person uses the information and data collected for the report for a purpose other than the development of or reporting of aggregate data in a manner such that the identity of the person or firm who supplied the information is not discernible and is not material to the intended uses of the information:
- (B) no person discloses any information or data collected for the report unless the information or data has been transformed into a statistical or aggregate form that does not allow the identification of the person or firm who supplied particular information; and
- (C) procedures are established to require the withholding of any information or data collected for the report if the Secretary determines that withholding is necessary to protect proprietary information, including any trade secrets or other confidential information
- (i) EDUCATION AND WORKFORCE.—
- (1) WORKFORCE ASSESSMENT.—Not later than 1 year and 300 days after the date of enactment of this Act, the Secretary of Labor (in consultation with the Secretary, the Director of the National Science Foundation, institutions of higher education with substantial expertise in mining, institutions of higher education with significant expertise in minerals research, including fundamental research into alternatives, and employers in the critical minerals sector) shall submit to Congress an assessment of the domestic availability of technically trained personnel necessary for critical mineral exploration, development, assessment, production, manufacturing, recycling, analysis, forecasting, education, and research, including an analvsis of-
- (A) skills that are in the shortest supply as of the date of the assessment;
- (B) skills that are projected to be in short supply in the future:
- (C) the demographics of the critical minerals industry and how the demographics will evolve under the influence of factors such as an aging workforce;
- (D) the effectiveness of training and education programs in addressing skills shortages;
- (E) opportunities to hire locally for new and existing critical mineral activities;
- (F) the sufficiency of personnel within relevant areas of the Federal Government for achieving the policies described in section 3 of the National Materials and Minerals Policy, Research and Development Act of 1980 (30 U.S.C. 1602); and
- (G) the potential need for new training programs to have a measurable effect on the supply of trained workers in the critical minerals industry.
 - (2) CURRICULUM STUDY.—
- (A) IN GENERAL.—The Secretary and the Secretary of Labor shall jointly enter into an arrangement with the National Academy of Sciences and the National Academy of Engineering under which the Academies shall coordinate with the National Science Foundation on conducting a study—

- (i) to design an interdisciplinary program on critical minerals that will support the critical mineral supply chain and improve the ability of the United States to increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling;
- (ii) to address undergraduate and graduate education, especially to assist in the development of graduate level programs of research and instruction that lead to advanced degrees with an emphasis on the critical mineral supply chain or other positions that will increase domestic, critical mineral exploration, development, production, manufacturing, research, including fundamental research into alternatives, and recycling:
- (iii) to develop guidelines for proposals from institutions of higher education with substantial capabilities in the required disciplines for activities to improve the critical mineral supply chain and advance the capacity of the United States to increase domestic, critical mineral exploration, research, development, production, manufacturing, and recycling; and
- (iv) to outline criteria for evaluating performance and recommendations for the amount of funding that will be necessary to establish and carry out the program described in paragraph (3).
- (B) REPORT.—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit to Congress a description of the results of the study required under subparagraph (A).
 - (3) Program.—
- (A) ESTABLISHMENT.—The Secretary and the Secretary of Labor shall jointly conduct a competitive grant program under which institutions of higher education may apply for and receive 4-year grants for—
- (i) startup costs for newly designated faculty positions in integrated critical mineral education, research, innovation, training, and workforce development programs consistent with paragraph (2);
- (ii) internships, scholarships, and fellowships for students enrolled in programs related to critical minerals:
- (iii) equipment necessary for integrated critical mineral innovation, training, and workforce development programs; and
- (iv) research of critical minerals and their applications, particularly concerning the manufacture of critical components vital to national security.
- (B) RENEWAL.—A grant under this paragraph shall be renewable for up to 2 additional 3-year terms based on performance criteria outlined under paragraph (2)(A)(iv).
- (j) NATIONAL GEOLOGICAL AND GEOPHYSICAL DATA PRESERVATION PROGRAM.—Section 351(k) of the Energy Policy Act of 2005 (42 U.S.C. 15908(k)) is amended by striking "\$30,000,000 for each of fiscal years 2006 through 2010" and inserting "\$5,000,000 for each of fiscal years 2021 through 2029, to remain available until expended".
 - (k) Administration.—
- (1) IN GENERAL.—The National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.) is repealed.
- (2) CONFORMING AMENDMENT.—Section 3(d) of the National Superconductivity and Competitiveness Act of 1988 (15 U.S.C. 5202(d)) is amended in the first sentence by striking ", with the assistance of the National Critical Materials Council as specified in the National Critical Materials Act of 1984 (30 U.S.C. 1801 et seq.),".
- (3) SAVINGS CLAUSES.-
- (A) IN GENERAL.—Nothing in this section or an amendment made by this section modifies any requirement or authority provided by—

- (i) the matter under the heading "GEOLOGI-CAL SURVEY" of the first section of the Act of March 3, 1879 (43 U.S.C. 31(a)); or
- (ii) the first section of Public Law 87-626 (43 U.S.C. 31(b)).
- (B) EFFECT ON DEPARTMENT OF DEFENSE.— Nothing in this section or an amendment made by this section affects the authority of the Secretary of Defense with respect to the work of the Department of Defense on critical material supplies in furtherance of the national defense mission of the Department of Defense.
- (C) SECRETARIAL ORDER NOT AFFECTED.— This section shall not apply to any mineral described in Secretarial Order No. 3324, issued by the Secretary on December 3, 2012, in any area to which the order applies.
 - (4) APPLICATION OF CERTAIN PROVISIONS.—
- (A) IN GENERAL.—Subsections (e) and (f) shall apply to—
- (i) an exploration project in which the presence of a byproduct is reasonably expected, based on known mineral companionality, geologic formation, mineralogy, or other factors; and
- (ii) a project that demonstrates that the byproduct is of sufficient grade that, when combined with the production of a host mineral, the byproduct is economic to recover, as determined by the applicable Secretary in accordance with subparagraph (B).
- (B) REQUIREMENT.—In making the determination under subparagraph (A)(ii), the applicable Secretary shall consider the cost effectiveness of the byproducts recovery.
- (1) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2029.

SEC. 2102. RARE EARTH ELEMENT ADVANCED COAL TECHNOLOGIES.

- (a) PROGRAM FOR EXTRACTION AND RECOVERY OF RARE EARTH ELEMENTS AND MINERALS FROM COAL AND COAL BYPRODUCTS.—
- (1) In general.—The Secretary of Energy, acting through the Assistant Secretary for Fossil Energy (referred to in this section as the "Secretary"), shall carry out a program under which the Secretary shall develop advanced separation technologies for the extraction and recovery of rare earth elements and minerals from coal and coal byproducts.
- (2) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out the program described in paragraph (1) \$23,000,000 for each of fiscal years 2021 through 2027.
- (b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report evaluating the development of advanced separation technologies for the extraction and recovery of rare earth elements and minerals from coal and coal byproducts, including acid mine drainage from coal mines and coal mine refuse and tailings.

SEC. 2103. MONITORING MINERAL INVESTMENTS UNDER BELT AND ROAD INITIATIVE OF PEOPLE'S REPUBLIC OF CHINA.

- (a) REPORT REQUIRED.—Not later than 1 year after the date of the enactment of this Act, the Director of National Intelligence, in consultation with the Secretary of Interior, the Secretary, the Secretary of Commerce, the Secretary of State, the Secretary of Defense, and the United States Trade Representative, shall submit to the appropriate congressional committees a report on investments in minerals under the Belt and Road Initiative of the People's Republic of China that includes an assessment of—
 - (1) notable past mineral investments;
- (2) whether and how such investments have increased the extent of control of minerals by the People's Republic of China;

- (3) any efforts by the People's Republic of China to counter or interfere with the goals of the Energy Resource Governance Initiative of the Department of State; and
- (4) the strategy of the People's Republic of China with respect to mineral investments.
- (b) MONITORING MECHANISM.—In conjunction with each report required by subsection (a), the Director shall submit to the appropriate congressional committees a list of any minerals with respect to which—
- (1) the People's Republic of China, directly or through the Belt and Road Initiative—
- (A) is increasing its concentration of extraction and processing;
- (B) is acquiring significant mining and processing facilities;
- (C) is maintaining or increasing export restrictions; or
- (D) has achieved substantial control of the supply of minerals used within an industry or related minerals; or
- (2) there is a significant difference between domestic prices in the People's Republic of China as compared to prices on international markets; or
- (3) there is a significant increase or volatility in price as a result of the Belt and Road Initiative of the People's Republic of China.
- (c) CRITICAL MINERAL EVALUATION.—For any mineral included on the list required by subsection (b) that is not already designated as critical by the Secretary of the Interior pursuant to section 2101, the Director shall—
- (1) determine, in consultation with the Secretary of the Interior, the Secretary, the Secretary of Commerce, the Secretary of State, the Secretary of Defense, and the United States Trade Representative, whether the mineral is strategic and critical to the defense or national security of the United States; and
- (2) make a recommendation to the Secretary of the Interior regarding the designation of the mineral under section 2101.
- (d) ANNUAL UPDATES.—The Director shall update the report required by subsection (a) and list required by subsection (b) not less frequently than annually.
- (e) FORM.—Each report or list required by this section shall be submitted in unclassified form but may include a classified annex.
- (f) APPROPRIATE CONGRESSIONAL COMMITTEES DEFINED.—In this section, the term "appropriate congressional committees" means—
- (1) the Committee on Energy and Natural Resources, the Committee on Foreign Relations, the Committee on Armed Services, the Committee on Finance, the Committee on Homeland Security and Governmental Affairs, the Committee on Commerce, Science, and Transportation, and the Committee on Appropriations of the Senate; and
- (2) the Committee on Energy and Commerce, the Committee on Foreign Affairs, the Committee on Armed Services, the Committee on Ways and Means, the Committee on Homeland Security, and the Committee on Appropriations of the House of Representatives.

Subtitle B—Cybersecurity and Grid Security and Modernization

PART I—CYBERSECURITY AND GRID SECURITY

SEC. 2201. INCENTIVES FOR ADVANCED CYBERSE-CURITY TECHNOLOGY INVESTMENT.

Part II of the Federal Power Act is amended by inserting after section 219 (16 U.S.C. 824s) the following:

"SEC. 219A. INCENTIVES FOR CYBERSECURITY IN-VESTMENTS.

- "(a) DEFINITIONS.—In this section:
- "(1) ADVANCED CYBERSECURITY TECH-NOLOGY.—The term 'advanced cybersecurity technology' means any technology, oper-

- ational capability, or service, including computer hardware, software, or a related asset, that enhances the security posture of public utilities through improvements in the ability to protect against, detect, respond to, or recover from a cybersecurity threat (as defined in section 102 of the Cybersecurity Act of 2015 (6 U.S.C. 1501)).
- "(2) ADVANCED CYBERSECURITY TECHNOLOGY INFORMATION.—The term 'advanced cybersecurity technology information' means information relating to advanced cybersecurity technology or proposed advanced cybersecurity technology that is generated by or provided to the Commission or another Federal agency.
- "(b) STUDY.—Not later than 180 days after the date of enactment of this section, the Commission, in consultation with the Secretary of Energy, the North American Electric Reliability Corporation, the Electricity Subsector Coordinating Council, and the National Association of Regulatory Utility Commissioners, shall conduct a study to identify incentive-based, including performance-based, rate treatments for the transmission and sale of electric energy subject to the jurisdiction of the Commission that could be used to encourage—
- "(1) investment by public utilities in advanced cybersecurity technology; and
- "(2) participation by public utilities in cybersecurity threat information sharing programs.
- "(c) INCENTIVE-BASED RATE TREATMENT.—
 Not later than 1 year after the completion of the study under subsection (b), the Commission shall establish, by rule, incentive-based, including performance-based, rate treatments for the transmission of electric energy in interstate commerce and the sale of electric energy at wholesale in interstate commerce by public utilities for the purpose of benefitting consumers by encouraging—
- "(1) investments by public utilities in advanced cybersecurity technology; and
- "(2) participation by public utilities in cybersecurity threat information sharing programs.
- "'(d) Factors for Consideration.—In issuing a rule pursuant to this section, the Commission may provide additional incentives beyond those identified in subsection (c) in any case in which the Commission determines that an investment in advanced cybersecurity technology or information sharing program costs will reduce cybersecurity risks to—
- "(1) defense critical electric infrastructure (as defined in section 215A(a)) and other facilities subject to the jurisdiction of the Commission that are critical to public safety, national defense, or homeland security, as determined by the Commission in consultation with—
 - "(A) the Secretary of Energy;
- $\mbox{``(B)}$ the Secretary of Homeland Security; and
- $\mbox{``(C)}$ other appropriate Federal agencies; and
- "(2) facilities of small or medium-sized public utilities with limited cybersecurity resources, as determined by the Commission.
- "(e) RATEPAYER PROTECTION.—
- "(1) IN GENERAL.—Any rate approved under a rule issued pursuant to this section, including any revisions to that rule, shall be subject to the requirements of sections 205 and 206 that all rates, charges, terms, and conditions—
 - "(A) shall be just and reasonable; and
- "(B) shall not be unduly discriminatory or preferential.
- "(2) Prohibition of Duplicate Recovery.— Any rule issued pursuant to this section shall preclude rate treatments that allow unjust and unreasonable double recovery for advanced cybersecurity technology.

- "(f) SINGLE-ISSUE RATE FILINGS.—The Commission shall permit public utilities to apply for incentive-based rate treatment under a rule issued under this section on a single-issue basis by submitting to the Commission a tariff schedule under section 205 that permits recovery of costs and incentives over the depreciable life of the applicable assets, without regard to changes in receipts or other costs of the public utility.
- "(g) PROTECTION OF INFORMATION.—Advanced cybersecurity technology information that is provided to, generated by, or collected by the Federal Government under subsection (b), (c), or (f) shall be considered to be critical electric infrastructure information under section 215A."

SEC. 2202. RURAL AND MUNICIPAL UTILITY AD-VANCED CYBERSECURITY GRANT AND TECHNICAL ASSISTANCE PRO-GRAM.

- (a) DEFINITIONS.—In this section:
- (1) ADVANCED CYBERSECURITY TECHNOLOGY.—The term "advanced cybersecurity technology" means any technology, operational capability, or service, including computer hardware, software, or a related asset, that enhances the security posture of electric utilities through improvements in the ability to protect against, detect, respond to, or recover from a cybersecurity threat (as defined in section 102 of the Cybersecurity Act of 2015 (6 U.S.C. 1501)).
- (2) ELIGIBLE ENTITY.—The term "eligible entity" means—
 - (A) a rural electric cooperative:
- (B) a utility owned by a political subdivision of a State, such as a municipally owned electric utility:
- (C) a utility owned by any agency, authority, corporation, or instrumentality of 1 or more political subdivisions of a State;
- (D) a not-for-profit entity that is in a partnership with not fewer than 6 entities described in subparagraph (A), (B), or (C); and
- (E) an investor-owned electric utility that sells less than 4,000,000 megawatt hours of electricity per year.
- (3) PROGRAM.—The term "Program" means the Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program established under subsection
- (b) ESTABLISHMENT.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Homeland Security, the Federal Energy Regulatory Commission, the North American Electric Reliability Corporation, and the Electricity Subsector Coordinating Council, shall establish a program, to be known as the "Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program", to provide grants and technical assistance to, and enter into cooperative agreements with, eligible entities to protect against, detect, respond to, and recover from cybersecurity threats.
- (c) OBJECTIVES.—The objectives of the Program shall be—
- (1) to deploy advanced cybersecurity technologies for electric utility systems; and
- (2) to increase the participation of eligible entities in cybersecurity threat information sharing programs.
 - (d) AWARDS.—
 - (1) IN GENERAL.—The Secretary—
- (A) shall award grants and provide technical assistance under the Program to eligible entities on a competitive basis;
- (B) shall develop criteria and a formula for awarding grants and providing technical assistance under the Program;
- (C) may enter into cooperative agreements with eligible entities that can facilitate the objectives described in subsection (c); and
- (D) shall establish a process to ensure that all eligible entities are informed about and

can become aware of opportunities to receive grants or technical assistance under the Program.

- (2) PRIORITY FOR GRANTS AND TECHNICAL AS-SISTANCE.—In awarding grants and providing technical assistance under the Program, the Secretary shall give priority to an eligible entity that, as determined by the Secretary—
- (A) has limited cybersecurity resources;
- (B) owns assets critical to the reliability of the bulk power system; or
- (C) owns defense critical electric infrastructure (as defined in section 215A(a) of the Federal Power Act (16 U.S.C. 8240-1(a))).
- (e) PROTECTION OF INFORMATION.—Information provided to, or collected by, the Federal Government under this section—
- (1) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code; and
- (2) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority under any applicable law requiring public disclosure of information or records.
- (f) FUNDING.—There is authorized to be appropriated to carry out this section \$50,000,000 for each of fiscal years 2021 through 2025, to remain available until expended.

SEC. 2203. STATE ENERGY SECURITY PLANS.

(a) IN GENERAL.—Part D of title III of the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.) is amended by adding at the end the following:

"SEC. 367. STATE ENERGY SECURITY PLANS.

- "(a) IN GENERAL.—Federal financial assistance made available to a State under this part may be used for the development, implementation, review, and revision of a State energy security plan that assesses the State's existing circumstances and proposes methods to strengthen the ability of the State, in consultation with owners and operators of energy infrastructure in such State, to—
- "(1) secure the energy infrastructure of the State against all physical and cybersecurity threats;
- "(2) mitigate the risk of energy supply disruptions to the State and enhance the response to, and recovery from, energy disruptions; and
- "(3) ensure the State has a reliable, secure, and resilient energy infrastructure.
- "(b) CONTENTS OF PLAN.—A State energy security plan described in subsection (a) shall—
- "(1) address all energy sources and regulated and unregulated energy providers;
- "(2) provide a State energy profile, including an assessment of energy production, distribution, and end-use:
- "(3) address potential hazards to each energy sector or system, including physical threats and cybersecurity threats and vulnerabilities:
- "(4) provide a risk assessment of energy infrastructure and cross-sector interdependencies;
- "(5) provide a risk mitigation approach to enhance reliability and end-use resilience; and
- "(6) address multi-State, Indian Tribe, and regional coordination planning and response, and to the extent practicable, encourage mutual assistance in cyber and physical response plans.
- "(c) COORDINATION.—In developing or revising a State energy security plan under this section, the energy office of the State shall, to the extent practicable, coordinate with—
- "(1) the public utility or service commission of the State;
- "(2) energy providers from the private and public sectors; and

- "(3) other entities responsible for maintaining fuel or electric reliability and securing energy infrastructure.
- "(d) FINANCIAL ASSISTANCE.—A State is not eligible to receive Federal financial assistance under this part, for any purpose, for a fiscal year unless the Governor of such State submits to the Secretary, with respect to such fiscal year—
- "(1) a State energy security plan described in subsection (a) that meets the requirements of subsection (b); or
- "(2) after an annual review of the State energy security plan by the Governor—
- "(A) any necessary revisions to such plan;
- "(B) a certification that no revisions to such plan are necessary.
- "(e) TECHNICAL ASSISTANCE.—Upon request of the Governor of a State, the Secretary, in consultation with the Secretary of Homeland Security, may provide information and technical assistance, and other assistance, in the development, implementation, or revision of a State energy security plan.
 "(f) REQUIREMENT.—Each State receiving
- "(f) REQUIREMENT.—Each State receiving Federal financial assistance under this part shall provide reasonable assurance to the Secretary that the State has established policies and procedures designed to assure that the financial assistance will be used—
- "(1) to supplement, and not to supplant, State and local funds; and
- "(2) to the maximum extent practicable, to increase the amount of State and local funds that otherwise would be available, in the absence of the financial assistance, for the implementation of the State energy security plan under this section.
- "(g) PROTECTION OF INFORMATION.—Information provided to, or collected by, the Federal Government under this section—
- "(1) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code: and
- "(2) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority pursuant to any Federal, State, or Tribal law, as applicable, requiring public disclosure of information or records.
- "(h) SUNSET.—This section shall expire on October 31, 2024.".
- (b) AUTHORIZATION OF APPROPRIATIONS.— Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended—
- (1) by striking "\$125,000,000" and inserting "\$90,000,000"; and
- (2) by striking "2007 through 2012" and inserting "2021 through 2025".
- (c) TECHNICAL AND CONFORMING AMENDMENTS.—
- (1) CONFORMING AMENDMENTS.—Section 363 of the Energy Policy and Conservation Act (42 U.S.C. 6323) (as amended by section 1811) is amended—
 - (A) by striking subsection (e); and
- (B) by redesignating subsections (f) and (g) as subsections (e) and (f), respectively.
- (2) TECHNICAL AMENDMENT.—Section 366(3)(B)(i) of the Energy Policy and Conservation Act (42 U.S.C. 6326(3)(B)(i)) is amended by striking "approved under section 367".
- (3) REFERENCE.—The matter under the heading "ENERGY CONSERVATION" under the heading "DEPARTMENT OF ENERGY" in title II of the Department of the Interior and Related Agencies Appropriations Act, 1985 (42 U.S.C. 6323a) is amended by striking "sections 361 through 366" and inserting "sections 361 through 367".
- (4) TABLE OF CONTENTS.—The table of contents for part D of title III of the Energy Policy and Conservation Act (Public Law 94-163; 89 Stat. 872; 92 Stat. 3272; 104 Stat. 1006) is amended by adding at the end the following:
- "Sec. 367. State energy security plans.".

SEC. 2204. ENHANCING GRID SECURITY THROUGH PUBLIC-PRIVATE PARTNERSHIPS

- (a) DEFINITIONS.—In this section:
- (1) ELECTRIC RELIABILITY ORGANIZATION.— The term "Electric Reliability Organization" has the meaning given the term in section 215(a) of the Federal Power Act (16 U.S.C. 8240(a)).
- (2) ELECTRIC UTILITY; STATE REGULATORY AUTHORITY.—The terms "electric utility" and "State regulatory authority" have the meanings given those terms in section 3 of the Federal Power Act (16 U.S.C. 796).
- (b) PROGRAM TO PROMOTE AND ADVANCE PHYSICAL SECURITY AND CYBERSECURITY OF ELECTRIC UTILITIES.—
- (1) ESTABLISHMENT.—The Secretary, in consultation with the Secretary of Homeland Security, State regulatory authorities, industry stakeholders, the Electric Reliability Organization, and any other Federal agencies that the Secretary determines to be appropriate, shall carry out a program—
- (A) to develop, and provide for voluntary implementation of, maturity models, self-assessments, and auditing methods for assessing the physical security and cybersecurity of electric utilities;
- (B) to assist with threat assessment and cybersecurity training for electric utilities;
- (C) to provide technical assistance for electric utilities subject to the program;
- (D) to provide training to electric utilities to address and mitigate cybersecurity supply chain management risks;
- (E) to advance the cybersecurity of thirdparty vendors in partnerships with electric utilities; and
- (F) to increase opportunities for sharing best practices and data collection within the electric sector.
- (2) Scope.—In carrying out the program under paragraph (1), the Secretary shall—
- (A) take into consideration-
- (i) the different sizes of electric utilities; and
- (ii) the regions that electric utilities serve;(B) prioritize electric utilities with fewer
- available resources due to size or region; and (C) to the maximum extent practicable, use and leverage—
 - (i) existing Department programs; and
- (ii) existing programs of the Federal agencies determined to be appropriate under paragraph (1).
- (3) PROTECTION OF INFORMATION.—Information provided to, or collected by, the Federal Government pursuant to this subsection—
- (A) shall be exempt from disclosure under section 552(b)(3) of title 5, United States Code; and
- (B) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority pursuant to any Federal, State, political subdivision of a State, or Tribal law, respectively, requiring public disclosure of information or records.
- (c) REPORT ON CYBERSECURITY AND DISTRIBUTION SYSTEMS.—
- (1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Homeland Security, State regulatory authorities, industry stakeholders, and any other Federal agencies that the Secretary determines to be appropriate, shall submit to Congress a report that assesses—
- (A) priorities, policies, procedures, and actions for enhancing the physical security and cybersecurity of electricity distribution systems, including behind-the-meter generation, storage, and load management devices to address threats to, and vulnerabilities of, electricity distribution systems; and
- (B) the implementation of the priorities, policies, procedures, and actions assessed under subparagraph (A), including—

- (i) an estimate of potential costs and benefits of the implementation; and
- (ii) an assessment of any public-private cost-sharing opportunities.
- (2) PROTECTION OF INFORMATION.—Information provided to, or collected by, the Federal Government under this subsection-
- (A) shall be exempt from disclosure under section 552(b)(3) of title 5. United States Code; and
- (B) shall not be made available by any Federal agency, State, political subdivision of a State, or Tribal authority pursuant to any Federal, State, political subdivision of a State, or Tribal law, respectively, requiring public disclosure of information or records.

SEC. 2205. ENHANCED GRID SECURITY.

- (a) Definitions.—In this section:
- (1) ELECTRIC UTILITY.—The term "electric utility" has the meaning given the term in section 3 of the Federal Power Act (16 U.S.C. 796).
- (2) E-ISAC.—The term "E-ISAC" means the Electricity Sector Information Sharing and Analysis Center.
- (b) Cybersecurity for the Energy Sector RESEARCH, DEVELOPMENT, AND DEMONSTRA-TION PROGRAM.
- (1) IN GENERAL.—The Secretary, in consultation with the Secretary of Homeland Security and, as determined appropriate, other Federal agencies, the energy sector, the States, and other stakeholders, shall carry out a program-
- (A) to develop advanced cybersecurity applications and technologies for the energy sector-
- (i) to identify and mitigate vulnerabilities. including-
- (I) dependencies on other critical infrastructure; and
- (II) impacts from weather and fuel supply;
- (ii) to advance the security of field devices and third-party control systems, including-
- (I) systems for generation, transmission, distribution, end use, and market functions;
- (II) specific electric grid elements including advanced metering, demand response, distributed generation, and electricity storage;
- (III) forensic analysis of infected systems; and
- (IV) secure communications;
- (B) to leverage electric grid architecture as a means to assess risks to the energy sector. including by implementing an all-hazards approach to communications infrastructure. control systems architecture, and power systems architecture:
- to perform pilot demonstration projects with the energy sector to gain experience with new technologies; and
- (D) to develop workforce development curricula for energy sector-related cybersecuritv
- (2) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this subsection \$65,000,000 for each of fiscal years 2021 through 2029.
- (c) Energy Sector Component Testing FOR CYBERRESILIENCE PROGRAM.-
- (1) IN GENERAL.—The Secretary, in consultation with the Federal Acquisition Security Council, shall carry out a program-
- (A) to establish a cybertesting and mitigation program to identify vulnerabilities of energy sector supply chain products to known threats;
- oversee third-party cybertesting; (B) to
- (C) to develop procurement guidelines for energy sector supply chain components.
- (2) AUTHORIZATION OF APPROPRIATIONS. There is authorized to be appropriated to carry out this subsection \$15,000,000 for each of fiscal years 2021 through 2029.

- (d) Energy Sector Operational Support FOR CYBERRESILIENCE PROGRAM.
- (1) IN GENERAL.—The Secretary may carry out a program-
- (A) to enhance and periodically test
- (i) the emergency response capabilities of the Department; and
- (ii) the coordination of the Department with other agencies, the National Laboratories, and private industry;
- (B) to expand cooperation of the Department with the intelligence communities for energy sector-related threat collection and analysis;
- (C) to enhance the tools of the Department and E-ISAC for monitoring the status of the energy sector:
- (D) to expand industry participation in E-ISAC: and
- (E) to provide, in coordination with the Cybersecurity and Infrastructure Security Agency of the Department of Homeland Security, technical assistance to small electric assessing utilities for purposes ofcybermaturity level.
- (2) AUTHORIZATION OF APPROPRIATIONS.-There is authorized to be appropriated to carry out this subsection \$10,000,000 for each of fiscal years 2021 through 2029.
- (e) Modeling and Assessing Energy In-FRASTRUCTURE RISK.-
- (1) IN GENERAL.—The Secretary, in consultation with the Secretary of Homeland Security, shall develop an advanced energy security program to secure energy networks, including electric, natural gas, and oil exploration, transmission, and delivery.
- (2) SECURITY AND RESILIENCY OBJECTIVE.-The objective of the program developed under paragraph (1) is to increase the functional preservation of the electric grid operations or natural gas and oil operations in the face of natural and human-made threats and hazards, including electric magnetic pulse and geomagnetic disturbances.
- (3) Eligible activities.—In carrying out the program developed under paragraph (1), the Secretary may-
- develop capabilities to identify (A) vulnerabilities and critical components that pose major risks to grid security if destroyed or impaired;
- (B) provide modeling at the national level to predict impacts from natural or humanmade events;
- (C) develop a maturity model for physical security and cybersecurity;
- (D) conduct exercises and assessments to identify and mitigate vulnerabilities to the electric grid, including providing mitigation recommendations:
- (E) conduct research hardening solutions for critical components of the electric grid;
- (F) conduct research mitigation and recovery solutions for critical components of the electric grid; and
- (G) provide technical assistance to States and other entities for standards and risk analysis.
- (4) AUTHORIZATION OF APPROPRIATIONS.-There is authorized to be appropriated to carry out this subsection \$10,000,000 for each of fiscal years 2021 through 2029.
- (f) LEVERAGING EXISTING PROGRAMS.—The programs established under this section shall be carried out consistent with-
- (1) the report of the Department entitled Roadmap to Achieve Energy Delivery Systems Cybersecurity" and dated 2011;
- (2) existing programs of the Department;
- (3) any associated strategic framework that links together academic and National Laboratory researchers, electric utilities, manufacturers, and any other relevant private industry organizations, including the Electricity Sub-sector Coordinating Council.

PART II—GRID MODERNIZATION

SEC. 2210. GRID STORAGE PROGRAM.

- (a) IN GENERAL -The Secretary shall conduct a program of research, development, and demonstration of electric grid energy storage that addresses the principal challenges identified in the 2013 Department of Energy Strategic Plan for Grid Energy Storage.
- (b) Areas of Focus.—The program under this section shall focus on-
- (1) materials, electric thermal. electromechanical, and electrochemical systems research;
 - (2) power conversion technologies research;
 - (3) developing-
- (A) empirical and science-based industry standards to compare the storage capacity. cycle length and capabilities, and reliability of different types of electricity storage; and
 - (B) validation and testing techniques:
- (4) other fundamental and applied research critical to widespread deployment of electricity storage:
- (5) device development that builds on results from research described in paragraphs (1), (2), and (4), including combinations of power electronics, advanced optimizing controls, and energy storage as a general purpose element of the electric grid;
- (6) grid-scale testing and analysis of storage devices, including test-beds and field trials:
- (7) cost-benefit analyses that inform capital expenditure planning for regulators and owners and operators of components of the electric grid;
- (8) electricity storage device safety and reliability, including potential failure modes, mitigation measures, and operational guide-
- (9) standards for storage device performance, control interface, grid interconnection, and interoperability; and
- (10) maintaining a public database of energy storage projects, policies, codes, standards, and regulations.
- (c) Assistance to States.—The Secretary may provide technical and financial assistto States, Indian Tribes, or units of local government to participate in or use research, development, or demonstration of technology developed under this section.
- (d) AUTHORIZATION OF APPROPRIATIONS.-There is authorized to be appropriated to the Secretary to carry out this section \$50,000,000 for each of fiscal years 2021 through 2029.
- (e) No Effect on Other Provisions of LAW.—Nothing in this Act or an amendment made by this Act authorizes regulatory actions that would duplicate or conflict with regulatory requirements, mandatory standards, or related processes under section 215 of the Federal Power Act (16 U.S.C. 8240).
- (f) USE OF FUNDS.—To the maximum extent practicable, in carrying out this section, the Secretary shall ensure that the use of funds to carry out this section is coordinated among different offices within the Grid Modernization Initiative of the Department and other programs conducting energy storage research.

SEC. 2211. TECHNOLOGY DEMONSTRATION ON THE DISTRIBUTION SYSTEM.

- (a) IN GENERAL.—The Secretary shall establish a grant program to carry out eligible projects related to the modernization of the electric grid, including the application of technologies to improve observability, advanced controls, and prediction of system performance on the distribution system.
- (b) ELIGIBLE PROJECTS.—To be eligible for a grant under subsection (a), a project
- (1) be designed to improve the performance and efficiency of the future electric grid, while ensuring the continued provision of safe, secure, reliable, and affordable power;

- (2) demonstrate—
- (A) secure integration and management of two or more energy resources, including distributed energy generation, combined heat and power, micro-grids, energy storage, electric vehicles, energy efficiency, demand response, and intelligent loads; and
- (B) secure integration and interoperability of communications and information technologies; and
- (3) be subject to the requirements of section 545(a) of the Energy Security and Independence Act of 2007 (42 U.S.C. 17155(a)).

SEC. 2212. MICRO-GRID AND HYBRID MICRO-GRID SYSTEMS PROGRAM.

- (a) Definitions.—In this section:
- (1) HYBRID MICRO-GRID SYSTEM.—The term "hybrid micro-grid system" means a microgrid system that—
- (A) comprises generation from both conventional and renewable energy resources; and
- (B) may use grid-scale energy storage.
- (2) ISOLATED COMMUNITY.—The term "isolated community" means a community that is powered by a stand-alone electric generation and distribution system without the economic and reliability benefits of connection to a regional electric grid.
- (3) MICRO-GRID SYSTEM.—The term "microgrid system" means a localized grid that operates autonomously, regardless of whether the grid can operate in connection with another grid.
- (4) STRATEGY.—The term "strategy" means the strategy developed pursuant to subsection (b)(2)(B).
 - (b) Program.
- (1) ESTABLISHMENT.—The Secretary shall establish a program to promote the development of—
- (A) hybrid micro-grid systems for isolated communities; and
- (B) micro-grid systems to increase the resilience of critical infrastructure.
- (2) PHASES.—The program established under paragraph (1) shall be divided into the following phases:
- (A) Phase I, which shall consist of the development of a feasibility assessment for—
- (i) hybrid micro-grid systems in isolated communities; and
- (ii) micro-grid systems to enhance the resilience of critical infrastructure.
- (B) Phase II, which shall consist of the development of an implementation strategy, in accordance with paragraph (3), to promote the development of hybrid micro-grid systems for isolated communities, particularly for those communities exposed to extreme weather conditions and high energy costs, including electricity, space heating and cooling and transportation
- (C) Phase III, which shall be carried out in parallel with Phase II and consist of the development of an implementation strategy to promote the development of micro-grid systems that increase the resilience of critical infrastructure
- (D) Phase IV, which shall consist of costshared demonstration projects, based upon the strategies developed under subparagraph (B) that include the development of physical and cybersecurity plans to take appropriate measures to protect and secure the electric grid.
- (E) Phase V, which shall establish a benefits analysis plan to help inform regulators, policymakers, and industry stakeholders about the affordability, environmental and resilience benefits associated with Phases II, III and IV
- (3) REQUIREMENTS FOR STRATEGY.—In developing the strategy under paragraph (2)(B), the Secretary shall consider—
- (A) establishing future targets for the economic displacement of conventional generation using hybrid micro-grid systems, includ-

- ing displacement of conventional generation used for electric power generation, heating and cooling, and transportation;
- (B) the potential for renewable resources, including wind, solar, and hydropower, to be integrated into a hybrid micro-grid system;
- (C) opportunities for improving the efficiency of existing hybrid micro-grid systems;
- (D) the capacity of the local workforce to operate, maintain, and repair a hybrid micro-grid system;
- (E) opportunities to develop the capacity of the local workforce to operate, maintain, and repair a hybrid micro-grid system;
- (F) leveraging existing capacity within local or regional research organizations, such as organizations based at institutions of higher education, to support development of hybrid micro-grid systems, including by testing novel components and systems prior to field deployment:
- (G) the need for basic infrastructure to develop, deploy, and sustain a hybrid microgrid system;
- (H) input of traditional knowledge from local leaders of isolated communities in the development of a hybrid micro-grid system;
- (I) the impact of hybrid micro-grid systems on defense, homeland security, economic development, and environmental interests:
- (J) opportunities to leverage existing interagency coordination efforts and recommendations for new interagency coordination efforts to minimize unnecessary overhead, mobilization, and other project costs; and
- (K) any other criteria the Secretary determines appropriate.
- (c) COLLABORATION.—The program established under subsection (b)(1) shall be carried out in collaboration with relevant stakeholders, including, as appropriate—
 - (1) States;
 - (2) Indian Tribes;
 - (3) regional entities and regulators;
 - (4) units of local government;
 - (5) institutions of higher education; and
 - (6) private sector entities.
- (d) REPORT.—Not later than 180 days after the date of enactment of this Act, and annually thereafter until calendar year 2029, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the efforts to implement the program established under subsection (b)(1) and the status of the strategy developed under subsection (b)(2)(B).
- (e) MUNICIPAL MICRO-GRID SYSTEMS.—
- (1) REPORT.—Not later than 270 days after the date of enactment of this Act, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on the benefits of, and barriers to, implementing resilient micro-grid systems that are—
- (A)(i) owned or operated by isolated communities or municipal governments; or
- (ii) operated on behalf of municipal governments; and
- (B) designed to maximize the use of—
- (i) energy-generation facilities owned or operated by isolated communities; or
- (ii) municipal energy-generation facilities. (2) GRANTS TO OVERCOME BARRIERS.—The Secretary shall award grants of not more than \$500,000 to not fewer than 10 municipal governments or isolated communities each year to assist those municipal governments and isolated communities in overcoming the barriers identified in the report under paragraph (1).

SEC. 2213. ELECTRIC GRID ARCHITECTURE, SCE-NARIO DEVELOPMENT, AND MOD-ELING.

- (a) GRID ARCHITECTURE AND SCENARIO DE-VELOPMENT —
- (1) IN GENERAL.—Subject to paragraph (2), the Secretary shall establish and facilitate a collaborative process to develop model grid architecture and a set of future scenarios for the electric grid to examine the impacts of different combinations of resources (including different quantities of distributed energy resources and large-scale, central generation) on the electric grid.
- (2) MARKET STRUCTURE.—The grid architecture and scenarios developed under paragraph (1) shall account for differences in market structure, including an examination of the potential for stranded costs in each type of market structure.
 - (3) FINDINGS.-
- (A) IN GENERAL.—Based on the findings of grid architecture developed under paragraph (1), the Secretary shall—
- (i) determine whether any additional standards are necessary to ensure the interoperability of grid systems and associated communications networks; and
- (ii) if the Secretary makes a determination that additional standards are necessary under subparagraph (A), make recommendations for additional standards, including, as may be appropriate, to the Electric Reliability Organization under section 215 of the Federal Power Act (16 U.S.C. 8240).
- (B) CONSIDERATION.—The Electric Reliability Organization shall not be under any obligation to establish any process to consider the recommendations described in subparagraph (A)(ii).
- (b) MODELING.—Subject to subsection (c), the Secretary shall—
- (1) conduct modeling based on the scenarios developed under subsection (a); and
- (2) analyze and evaluate the technical and financial impacts of the models to assist States, utilities, and other stakeholders in—
- (A) enhancing strategic planning efforts;
- (B) avoiding stranded costs; and
- (C) maximizing the cost-effectiveness of future grid-related investments.
- (c) INPUT.—The Secretary shall develop the scenarios and conduct the modeling and analysis under subsections (a) and (b) with participation or input, as appropriate, from—
 - (1) the National Laboratories;
 - (2) States:
 - (3) State regulatory authorities;
 - (4) transmission organizations;
- (5) representatives of all sectors of the electric power industry;
 - (6) academic institutions;
 - (7) independent research institutes; and
 - (8) other entities.
- (d) Effect.—Nothing in this section grants any person a right to receive or review confidential, proprietary, or otherwise protected information concerning grid architecture or scenarios.

SEC. 2214. VOLUNTARY MODEL PATHWAYS.

- (a) ESTABLISHMENT OF VOLUNTARY MODEL PATHWAYS.—
- (1) ESTABLISHMENT.—Not later than 90 days after the date of enactment of this Act, the Secretary, in consultation with the steering committee established under paragraph (3), shall initiate the development of voluntary model pathways for modernizing the electric grid through a collaborative, public-private effort that—
- (A) produces illustrative policy pathways encompassing a diverse range of technologies that can be adapted for State and regional applications by regulators and policymakers;
- (B) facilitates the modernization of the electric grid and associated communications networks to achieve the objectives described in paragraph (2);

- (C) ensures a reliable, resilient, affordable, safe, and secure electric grid; and
- (D) acknowledges and accounts for different priorities, electric systems, and rate structures across States and regions.
- (2) OBJECTIVES.—The pathways established under paragraph (1) shall facilitate achievement of as many of the following objectives as practicable:
- $(\widetilde{\mathbf{A}})$ Near real-time situational awareness of the electric system.
 - (B) Data visualization.
- (C) Advanced monitoring and control of the advanced electric grid.
- (D) Enhanced certainty of policies for investment in the electric grid.
 - (E) Increased innovation.
 - $(F)\ Greater\ consumer\ empowerment.$
- (G) Enhanced grid resilience, reliability, and robustness.
 - (H) Improved—
- (i) integration of distributed energy resources;
- (ii) interoperability of the electric system; and
- (iii) predictive modeling and capacity forecasting.
 - (I) Reduced cost of service for consumers.
- (J) Diversification of generation sources.
- (3) STEERING COMMITTEE.—Not later than 90 days after the date of enactment of this Act, the Secretary shall establish a steering committee to help develop the pathways under paragraph (1), to be composed of members appointed by the Secretary, consisting of persons with appropriate expertise representing a diverse range of interests in the public, private, and academic sectors, including representatives of—
- (A) the Federal Energy Regulatory Commission:
- (B) the National Laboratories;
- (C) States;
- (D) State regulatory authorities;
- (E) transmission organizations;
- (F) representatives of all sectors of the electric power industry;
 - (G) institutions of higher education;
 - (H) independent research institutes; and
- (I) other entities.
- (b) TECHNICAL ASSISTANCE.—The Secretary may provide technical assistance to States, Indian Tribes, or units of local government to adopt or implement one or more elements of the pathways developed under subsection (a)(1), including on a pilot basis.

SEC. 2215. PERFORMANCE METRICS FOR ELEC-TRICITY INFRASTRUCTURE PRO-VIDERS.

- (a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary, in consultation with the steering committee established under section 2214(a)(3), shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Energy and Commerce of the House of Representatives a report that includes—
- (1) an evaluation of the performance of the electric grid as of the date of the report; and
- (2) a description of the projected range of measurable costs and benefits associated with the changes evaluated under the scenarios developed under section 2213.
- (b) CONSIDERATIONS FOR DEVELOPMENT OF METRICS.—In developing metrics for the evaluation and projections under subsection (a), the Secretary shall consider—
- (1) standard methodologies for calculating improvements or deteriorations in the performance metrics, such as reliability, grid efficiency, power quality, consumer satisfaction, sustainability, and financial incentives;
- (2) standard methodologies for calculating potential costs and measurable benefits value to ratepayers, applying the performance metrics developed under paragraph (1);

- (3) identification of tools, resources, and deployment models that may enable improved performance through the adoption of emerging, commercially available or advanced grid technologies or solutions, including—
 - (A) multicustomer micro-grids;
 - (B) distributed energy resources;
 - (C) energy storage;
- (D) electric vehicles;
- (E) electric vehicle charging infrastructure;
- (F) integrated information and communications systems;
 - (G) transactive energy systems; and
- (H) advanced demand management systems; and
- (4) the role of States and local regulatory authorities in enabling a robust future electric grid to ensure that—
- (A) electric utilities remain financially viable:
- (B) electric utilities make the needed investments that ensure a reliable, secure, and resilient grid; and
- (C) costs incurred to transform to an integrated grid are allocated and recovered responsibly, efficiently, and equitably.

SEC. 2216. VOLUNTARY STATE, REGIONAL, AND LOCAL ELECTRICITY DISTRIBUTION PLANNING.

- (a) In General.—On the request of a State, regional organization, or electric utility, the Secretary shall provide assistance to States, regional organizations, and electric utilities to facilitate the development of State, regional, and local electricity distribution plans by—
- (1) conducting a resource assessment and analysis of future demand and distribution requirements; and
- (2) developing open source tools for State, regional, and local planning and operations.
- (b) RISK AND SECURITY ANALYSIS.—The assessment under subsection (a)(1) shall include—
- (1) the evaluation of the physical security, cybersecurity, and associated communications needs of an advanced distribution management system and the integration of distributed energy resources; and
- (2) advanced use of grid architecture to analyze risks in an all-hazards approach that includes communications infrastructure, control systems architecture, and power systems architecture.
- (c) DESIGNATION.—The information collected for the assessment and analysis under subsection (a)(1)—
- (1) shall be considered to be critical electric infrastructure information under section 215A of the Federal Power Act (16 U.S.C. 8240-1); and
- (2) shall only be released in compliance with regulations implementing that section.
- (d) Technical Assistance.—For the purpose of assisting in the development of State and regional electricity distribution plans, the Secretary shall provide technical assistance to—
 - (1) States;
- (2) regional reliability entities; and
- (3) other distribution asset owners and operators.
- (e) WITHDRAWAL.—A State or any entity that has requested technical assistance under this section may withdraw the request for technical assistance at any time, and on such withdrawal, the Secretary shall terminate all assistance efforts.
- (f) EFFECT.—Nothing in this section authorizes the Secretary to require any State, regional organization, regional reliability entity, asset owner, or asset operator to adopt any model, tool, plan, analysis, or assessment.

SEC. 2217. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Secretary to carry out sections 2211 through 2216 \$200,000,000 for each of fiscal years 2021 through 2029.

SEC. 2218. STUDY ON THE IMPLEMENTATION OF MICROGRIDS IN WILDFIRE RISK AREAS.

Not later than 180 days after the date of enactment of this Act, the Secretary shall—

- (1) conduct a study relating to the implementation of microgrids in wildfire risk areas, including assessments of—
- (A) the means by which utilities can better plan for that implementation;
- (B) any permitting changes at the local, State, or Federal level that are necessary for that implementation; and
- (C) any other barriers to that implementation; and
- (2) make publicly available the results of the study conducted under paragraph (1).

SEC. 2219. NET METERING STUDY AND EVALUATION.

- (a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary shall seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (referred to in this section as the "National Academies") under which the National Academies shall—
- (1) study the opportunities and challenges associated with net metering; and
- (2) evaluate the expected medium- and long-term impacts of net metering.
- (b) ELEMENTS.—The study and evaluation conducted pursuant to the agreement entered into under subsection (a) shall address.—
- (1) developments in net metering, including the emergence of new technologies;
- (2) alternatives to existing metering systems that—
 - (A) provide for transactions that—
- (i) measure electric energy consumption by an electric consumer at the home or facility of that electric consumer; and
- (ii) are capable of sending electric energy usage information through a communications network to an electric utility;
- (B) promote equitable distribution of resources and costs; and
- (C) provide incentives for the use of distributed renewable generation;
- (3) net metering planning and operating techniques;
- (4) effective architecture for net metering; (5) successful net metering business mod-
- (6) consumer and industry incentives for net metering;
- (7) the role of renewable resources in the electric grid;
- (8) the role of net metering in developing future models for renewable infrastructure; and
- (9) the use of battery storage with net metering.
 - (c) Report.—
- (1) IN GENERAL.—The agreement entered into under subsection (a) shall require the National Academies to submit to the Secretary, not later than 2 years after entering into the agreement, a report that describes the results of the study and evaluation conducted pursuant to the agreement.
- (2) PUBLIC AVAILABILITY.—The report submitted under paragraph (1) shall be made available to the public through electronic means, including the internet.

Subtitle C—Workforce Development SEC. 2301. DEFINITIONS.

In this subtitle:

(1) WIOA TERMS.—The terms "community-based organization", "economic development agency", "recognized postsecondary credential", and "State" have the meanings given the terms in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

- (2) APPRENTICESHIP PROGRAM.—The term "apprenticeship program" means an apprenticeship registered under the Act of August 16, 1937 (commonly known as the "National Apprenticeship Act") (50 Stat. 664, chapter 663; 29 U.S.C. 50 et seq.), including, as in effect on December 30, 2019, any requirement, standard, or rule promulgated under that Act.
- (3) AREA CAREER AND TECHNICAL EDUCATION SCHOOL.—The term "area career and technical education school" has the meaning given the term in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).
- (4) BOARD.—The term "Board" means the 21st Century Energy Workforce Advisory Board established under section 2304(a).
- (5) COVERED FACILITY OF THE NATIONAL NUCLEAR SECURITY ADMINISTRATION.—The term "covered facility of the National Nuclear Security Administration" means a national security laboratory or a nuclear weapons production facility (as those terms are defined in section 4002 of the Atomic Energy Defense Act (50 U.S.C. 2501)).
- (6) ELIGIBLE SPONSOR.—The term "eligible sponsor" means a public organization or an organization described in section 501(c) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of that Code that—
- (A) with respect to an apprenticeship program, administers such program through a partnership that may include—
 - (i) a business;

labor

- (ii) an employer or industry association;
- (iii) a labor-management organization;
- (iv) a local workforce development board or State workforce development board;
- (v) a 2- or 4-year institution of higher education that offers an educational program leading to an associate's or bachelor's degree in conjunction with a certificate of completion of apprenticeship;
- (vi) the Armed Forces (including the National Guard and Reserves):
- (vii) a community-based organization;
- $\left(\text{viii}\right)$ a labor organization with significant energy experience; or
- (ix) an economic development agency; and (B) with respect to a preapprenticeship program, is a local educational agency, a secondary school, an area career and technical education school, a State workforce development board, a local workforce development board, a labor organization, or a community-based organization, that administers such program with any required coordination and necessary approvals from the Secretary of Labor or a State department of
- (7) INDIAN TRIBE.—The term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).
- (8) INSTITUTION OF HIGHER EDUCATION.—The term "institution of higher education" has the meaning given the term in section 101 and subparagraphs (A) and (B) of section 102(a)(1) of the Higher Education Act of 1965 (20 U.S.C. 1001, 1002(a)(1)).
- (9) LABOR ORGANIZATION.—The term "labor organization" has the meaning given the term in section 2 of the National Labor Relations Act (29 U.S.C. 152).
- (10) LOCAL EDUCATIONAL AGENCY.—The term "local educational agency" has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).
- (11) LOCAL WORKFORCE DEVELOPMENT BOARD.—The term "local workforce development board" has the meaning given the term "local board" in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

- (12) MINORITY-SERVING INSTITUTION.—The term "minority-serving institution" means an institution of higher education eligible to receive funds under section 320 or 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1059g, 1067q(a)).
- (13) PREAPPRENTICESHIP.—The term "preapprenticeship", used with respect to a program, means an initiative or set of strategies that—
- (A) is designed to prepare participants to enter an apprenticeship program;
- (B) is carried out by an eligible sponsor that has a documented partnership with 1 or more sponsors of apprenticeship programs;
- (C) includes each of the following:
- (i) Training (including a curriculum for the training) aligned with industry standards related to an apprenticeship program and reviewed and approved annually by sponsors of the apprenticeship program within the documented partnership that will prepare participants by teaching the skills and competencies needed to enter 1 or more apprenticeship programs.
- (ii) Hands-on training and theoretical education for participants that does not displace a paid employee.
- (iii) A formal agreement with a sponsor of an apprenticeship program that would enable participants who successfully complete the preapprenticeship program—
- (I) to enter directly into the apprenticeship program if a place in the program is available and if the participant meets the qualifications of the apprenticeship program; and
- (II) to earn credits towards the apprenticeship program.
- (14) SECONDARY SCHOOL.—The term "secondary school" has the meaning given the term in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).
- (15) STATE WORKFORCE DEVELOPMENT BOARD.—The term "State workforce development board" has the meaning given the term "State board" in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).
- (16) TRIBAL ORGANIZATION.—The term "tribal organization" has the meaning given the term in section 3765 of title 38, United States Code

SEC. 2302. ADDRESSING INSUFFICIENT COM-PENSATION OF EMPLOYEES AND OTHER PERSONNEL OF THE FED-ERAL ENERGY REGULATORY COM-MISSION.

- (a) IN GENERAL.—Section 401 of the Department of Energy Organization Act (42 U.S.C. 7171) is amended by adding at the end the following:
- "(k) Addressing Insufficient Compensation of Employees and Other Personnel of the Commission.—
- "(1) IN GENERAL.—Notwithstanding any other provision of law, if the Chairman publicly certifies that compensation for a category of employees or other personnel of the Commission is insufficient to retain or attract employees and other personnel to allow the Commission to carry out the functions of the Commission in a timely, efficient, and effective manner, the Chairman may fix the compensation for the category of employees or other personnel without regard to chapter 51 and subchapter III of chapter 53 of title 5, United States Code, or any other civil service law.
- "(2) CERTIFICATION REQUIREMENTS.—A certification issued under paragraph (1) shall—
- "(A) apply with respect to a category of employees or other personnel responsible for conducting work of a scientific, technological, engineering, or mathematical nature:

- "(B) specify a maximum amount of reasonable compensation for the category of employees or other personnel;
- "(C) be valid for a 5-year period beginning on the date on which the certification is issued:
- "(D) be no broader than necessary to achieve the objective of retaining or attracting employees and other personnel to allow the Commission to carry out the functions of the Commission in a timely, efficient, and effective manner; and
- "(E) include an explanation for why the other approaches available to the Chairman for retaining and attracting employees and other personnel are inadequate.
 - "(3) Renewal.—
- "(A) IN GENERAL.—Not later than 90 days before the date of expiration of a certification issued under paragraph (1), the Chairman shall determine whether the certification should be renewed for a subsequent 5-year period.
- "(B) REQUIREMENT.—If the Chairman determines that a certification should be renewed under subparagraph (A), the Chairman may renew the certification, subject to the certification requirements under paragraph (2) that were applicable to the initial certification
- "(4) NEW HIRES.—
- "(A) IN GENERAL.—An employee or other personnel that is a member of a category of employees or other personnel that would have been covered by a certification issued under paragraph (1), but was hired during a period in which the certification has expired and has not been renewed under paragraph (3) shall not be eligible for compensation at the level that would have applied to the employee or other personnel if the certification had been in effect on the date on which the employee or other personnel was hired.
- "(B) COMPENSATION OF NEW HIRES ON RENEWAL.—On renewal of a certification under paragraph (3), the Chairman may fix the compensation of the employees or other personnel described in subparagraph (A) at the level established for the category of employees or other personnel in the certification.
- "(5) RETENTION OF LEVEL OF FIXED COM-PENSATION.—A category of employees or other personnel, the compensation of which was fixed by the Chairman in accordance with paragraph (1), may, at the discretion of the Chairman, have the level of fixed compensation for the category of employees or other personnel retained, regardless of whether a certification described under that paragraph is in effect with respect to the compensation of the category of employees or other personnel.
- "(6) CONSULTATION REQUIRED.—The Chairman shall consult with the Director of the Office of Personnel Management in implementing this subsection, including in the determination of the amount of compensation with respect to each category of employees or other personnel.
 - "(7) EXPERTS AND CONSULTANTS.—
- "(A) IN GENERAL.—Subject to subparagraph (B), the Chairman may—
- "(i) obtain the services of experts and consultants in accordance with section 3109 of title 5, United States Code;
- "(ii) compensate those experts and consultants for each day (including travel time) at rates not in excess of the rate of pay for level IV of the Executive Schedule under section 5315 of that title; and
- "(iii) pay to the experts and consultants serving away from the homes or regular places of business of the experts and consultants travel expenses and per diem in lieu of subsistence at rates authorized by sections 5702 and 5703 of that title for persons in Government service employed intermittently.
 - "(B) LIMITATIONS.—The Chairman shall—

- "(i) to the maximum extent practicable, limit the use of experts and consultants pursuant to subparagraph (A); and
- "(ii) ensure that the employment contract of each expert and consultant employed pursuant to subparagraph (A) is subject to renewal not less frequently than annually.".
 - (b) Reports.-
- (1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and every 2 years thereafter for 10 years, the Chairman of the Federal Energy Regulatory Commission shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report on information relating to hiring, vacancies, and compensation at the Federal Energy Regulatory Commission.
- (2) INCLUSIONS.—Each report under paragraph (1) shall include—
- (A) an analysis of any trends with respect to hiring, vacancies, and compensation at the Federal Energy Regulatory Commission; and
- (B) a description of the efforts to retain and attract employees or other personnel responsible for conducting work of a scientific, technological, engineering, or mathematical nature at the Federal Energy Regulatory Commission.
- (c) APPLICABILITY.—The amendment made by subsection (a) shall apply beginning on the date that is 30 days after the date of enactment of this Act.

SEC. 2303. REPORT ON THE AUTHORITY OF THE SECRETARY TO IMPLEMENT FLEXIBLE COMPENSATION MODELS.

Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to Congress a report examining the full scope of the hiring authority made available to the Secretary by the Office of Personnel Management to implement flexible compensation models, including pay for performance and pay banding, throughout the Department, including at the National Laboratories, for the purposes of hiring, recruiting, and retaining employees responsible for conducting work of a scientific, technological, engineering, or mathematical nature.

SEC. 2304. 21ST CENTURY ENERGY WORKFORCE ADVISORY BOARD.

- (a) ESTABLISHMENT.—The Secretary shall establish a board, to be known as the "21st Century Energy Workforce Advisory Board", to develop a strategy for the Department that, with respect to the role of the Department in the support and development of a skilled energy workforce—
- (1) meets the current and future industry and labor needs of the energy sector;
- (2) provides opportunities for students to become qualified for placement in traditional energy sector and clean energy sector jobs:
- (3) identifies areas in which the Department can effectively utilize the technical expertise of the Department to support the workforce activities of other Federal agencies;
- (4) strengthens and engages the workforce training programs of the Department and the National Laboratories in carrying out the Minorities in Energy Initiative of the Department and other Department workforce priorities;
- (5) develops plans to support and retrain displaced and unemployed energy sector workers; and
- (6) prioritizes education and job training for underrepresented groups, including racial and ethnic minorities, Indian tribes, women, veterans, and socioeconomically disadvantaged individuals.
 - (b) Membership.—
- (1) IN GENERAL.—The Board shall be composed of not fewer than 10 and not more than

- 15 members, with the initial members of the Board to be appointed by the Secretary not later than 1 year after the date of enactment of this Act.
- (2) REQUIREMENT.—The Board shall include not fewer than 1 representative of a labor organization with significant energy experience who has been nominated by a national labor federation.
- (3) QUALIFICATIONS.—Each individual appointed to the Board under paragraph (1) shall have expertise in—
- (A) the field of economics or workforce development;
- (B) relevant traditional energy industries or clean energy industries;
 - (C) secondary or postsecondary education;
- (D) energy workforce development or apprenticeship programs of States or units of local government;
- (\mathbf{E}) relevant organized labor organizations; or
- (F) bringing underrepresented groups, including racial and ethnic minorities, women, veterans, and socioeconomically disadvantaged individuals, into the workforce.
- (4) LIMITATION.—No individual shall be appointed to the Board who is an employee or a board member of an entity applying for a grant under section 2305 or 2306.
- (c) ADVISORY BOARD REVIEW AND RECOMMENDATIONS.—
- (1) DETERMINATION BY BOARD.—In developing the strategy required under subsection (a), the Board shall—
- (A) determine whether there are opportunities to more effectively and efficiently use the capabilities of the Department in the development of a skilled energy workforce;
- (B) identify ways in which the Department could work with other relevant Federal agencies, States, units of local government, institutions of higher education, labor organizations, Indian tribes and tribal organizations, and industry in the development of a skilled energy workforce:
- (C) identify ways in which the Department and National Laboratories can—
- (i) increase outreach to minority-serving institutions; and
- (ii) make resources available to increase the number of skilled minorities and women trained to go into the energy- and manufacturing-related sectors;
- (iii) increase outreach to displaced and unemployed energy sector workers; and
- (iv) make resources available to provide training to displaced and unemployed energy sector workers to reenter the energy workforce: and
- (D)(i) identify the energy sectors in greatest need of workforce training; and
- (ii) in consultation with the Secretary of Labor, develop guidelines for the skills necessary to develop a workforce trained to work in those energy sectors.
- (2) REQUIRED ANALYSIS.—In developing the strategy required under subsection (a), the Board shall analyze the effectiveness of—
- (A) existing Department-directed support; and
- (B) developing energy workforce training programs.
 - (3) Report.
- (A) IN GENERAL.—Not later than 1 year after the date on which the Board is established under this section, and biennially thereafter until the date on which the Board is terminated under subsection (g), the Board shall submit to the Secretary a report containing, with respect to the strategy required under subsection (a)—
- (i) the findings of the Board; and
- (ii) the proposed energy workforce strategy of the Board.
- (B) RESPONSE OF THE SECRETARY.—Not later than 60 days after the date on which a

- report is submitted to the Secretary under subparagraph (A), the Secretary shall—
- (i) submit to the Board a response to the report that—
- (I) describes whether the Secretary approves or disapproves of each recommendation of the Board under subparagraph (A); and
- (II) if the Secretary approves of a recommendation, provides an implementation plan for the recommendation; and
 - (ii) submit to Congress-
- (I) the report of the Board under subparagraph (A); and
- (II) the response of the Secretary under clause (i).
 - (C) Public availability of report.
- (i) IN GENERAL.—The Board shall make each report under subparagraph (A) available to the public on the earlier of—
- (I) the date on which the Board receives the response of the Secretary under subparagraph (B)(i); and
- (II) the date that is 90 days after the date on which the Board submitted the report to the Secretary.
- (ii) REQUIREMENT.—If the Board has received a response to a report from the Secretary under subparagraph (B)(i), the Board shall make that response publicly available with the applicable report.
 - (d) Energy Jobs Survey and Analysis.—
- (1) IN GENERAL.—The Secretary, acting through the Administrator of the Energy Information Administration, shall—
- (A) conduct a voluntary survey of employers in the energy, energy efficiency, and motor vehicle sectors of the economy of the United States: and
- (B) perform an analysis of the employment figures and demographics in those sectors, including the number of personnel in each sector who devote a substantial portion of working hours, as determined by the Secretary, to compliance matters.
- (2) METHODOLOGY.—In conducting the survey and analysis under paragraph (1), the Secretary shall employ a methodology that—
- (A) was approved in 2016 by the Office of Management and Budget for use in the document entitled "OMB Control Number 1910–5179":
- (B) uses a representative, stratified sampling of businesses in the United States; and
- (C) is designed to elicit a comparable number of responses from businesses in each State and with the same North American Industry Classification System codes as were received for the 2016 and 2017 reports entitled "U.S. Energy and Employment Report".
- (3) CONSULTATION.—In conducting the survey and analysis under paragraph (1), the Secretary shall consult with key stakeholders, including—
- (A) as the Secretary determines to be appropriate, the heads of relevant Federal agencies and offices, including—
 - (i) the Secretary of Commerce;
 - (ii) the Secretary of Transportation;
- (iii) the Director of the Bureau of the Census;
- (iv) the Commissioner of the Bureau of Labor Statistics; and
- $\begin{tabular}{ll} (v) & the & Administrator & of & the & Environmental Protection Agency; \end{tabular}$
- (B) officials of State agencies responsible for maintaining State employment data;
- (C) the State Energy Advisory Board established by section 365(g) of the Energy Policy and Conservation Act (42 U.S.C. 6325(g));
- (D) energy industry trade associations; and
- (E) labor organizations with significant energy experience.
 - (e) REPORTS BY THE SECRETARY.—
- (1) REPORT ON WORKFORCE BOARD.—Not later than 180 days before the date of expiration of a term of the Board under subsection

- (g), the Secretary shall submit to the Committees on Energy and Natural Resources and Appropriations of the Senate and the Committees on Energy and Commerce and Appropriations of the House of Representatives a report that—
- (A) describes the effectiveness and accomplishments of the Board during the applicable term:
- (B) contains a determination of the Secretary as to whether the Board should be renewed; and
- (C) if the Secretary determines that the Board should be renewed, any recommendations as to whether and how the scope and functions of the Board should be modified.
 - (2) Energy and employment report.—
- (A) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the Secretary shall—
- (i) make publicly available on the website of the Department a report, to be entitled the "U.S. Energy and Employment Report"; describing the employment figures and demographics in the energy, energy efficiency, and motor vehicle sectors of the United States based on the survey and analysis conducted under subsection (d); and
- (ii) subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act of 2002 (44 U.S.C. 3501 note; Public Law 107–347), make the data collected under subsection (d) publicly available on the website of the Department.
 - (B) Contents.
- (i) IN GENERAL.—The report under subparagraph (A) shall include employment figures and demographic data for—
- (I) the energy sector of the economy of the United States, including—
- (aa) the electric power generation and fuels sectors; and
- (bb) the transmission, storage, and distribution sectors;
- (II) the energy efficiency sector of the economy of the United States; and
- (III) the motor vehicle sector of the economy of the United States.
- (ii) INCLUSION.—With respect to each sector described in clause (i), the report under subparagraph (A) shall include employment fig-
- ures and demographic data sorted by—

 (I) each technology, subtechnology, and fuel type of those sectors; and
- (II) subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act of 2002 (44 U.S.C. 3501 note; Public Law 107–347)—
 - (aa) each State;
 - (bb) each territory of the United States;
 - (cc) the District of Columbia; and
- (dd) to the maximum extent practicable, each county (or equivalent jurisdiction) in the United States.
- (f) OUTREACH TO MINORITY-SERVING INSTITUTIONS, VETERANS, AND DISPLACED AND UNEMPLOYED ENERGY WORKERS.—In developing the strategy under subsection (a), the Board shall—
- (1) give special consideration to increasing outreach to minority-serving institutions, veterans, and displaced and unemployed energy workers:
 - (2) make resources available to—
- (A) minority-serving institutions, with the objective of increasing the number of skilled minorities and women trained to go into the energy and manufacturing sectors;
- (B) institutions that serve veterans, with the objective of increasing the number veterans in the energy industry by ensuring that veterans have the credentials and training necessary to secure careers in the energy industry; and
- (C) institutions that serve displaced and unemployed energy workers to increase the number of individuals trained for jobs in the energy industry;

- (3) encourage the energy industry to improve the opportunities for students of minority-serving institutions, veterans, and displaced and unemployed energy workers to participate in internships, preapprenticeships, and cooperative workstudy programs in the energy industry; and
- (4) work with the National Laboratories to increase the participation of underrepresented groups, veterans, and displaced and unemployed energy workers in internships, fellowships, training programs, and employment at the National Laboratories.
- (g) Term.-
- (1) IN GENERAL.—Subject to paragraph (2), the Board shall terminate on September 30, 2025.
- (2) EXTENSIONS.—The Secretary may renew the Board for 1 or more 5-year periods by submitting, not later than the date described in subsection (e)(1), a report described in that subsection that contains a determination by the Secretary that the Board should be renewed.

SEC. 2305. NATIONAL LABORATORY JOBS ACCESS PILOT PROGRAM.

- (a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Labor, shall establish a pilot program to award, on a competitive basis, grants to eligible entities described in subsection (c) for the Federal share of the costs of technical, skills-based preapprenticeship and apprenticeship programs that provide employer-driven or recognized postsecondary credentials.
- (b) REQUIREMENTS.—A program funded by a grant awarded under this section shall develop and deliver customized and competency-based training that—
- (1) is focused on skills and qualifications needed to meet the immediate and on-going needs of traditional and emerging technician positions (including machinists and cyber security technicians) at the National Laboratories and covered facilities of the National Nuclear Security Administration;
- (2) creates an apprenticeship program or preapprenticeship partnership with a National Laboratory or covered facility of the National Nuclear Security Administration; and
- (3) creates an apprenticeship program or preapprenticeship program with the Secretary of Labor or a State department of labor in coordination with a National Laboratory or covered facility of the National Nuclear Security Administration.
- (c) ELIGIBLE ENTITIES.—To be eligible to receive a grant under this section, an entity shall be an eligible sponsor that—
- (1) demonstrates experience in implementing and operating apprenticeship programs or preapprenticeship programs;
- (2)(A) has a relationship with a National Laboratory or covered facility of the National Nuclear Security Administration;
- (B) has knowledge of technician workforce needs of such laboratory or facility and the associated security requirements of such laboratory or facility; and
- (C) is eligible to enter into an agreement with such laboratory or facility that would be paid for in part or entirely from grant funds received under this section;
- (3) demonstrates the ability to recruit and support individuals who plan to work in the energy industry in the successful completion of relevant job training and education programs;
- (4) provides students who complete a program funded by a grant awarded under this section with a recognized postsecondary credential; and
- (5) demonstrates successful outcomes connecting graduates of preapprenticeship or ap-

- prenticeship programs to careers relevant to such programs.
- (d) APPLICATIONS.—An eligible entity desiring a grant under this section shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.
- (e) PRIORITY.—In selecting eligible entities to receive grants under this section, the Secretary shall prioritize applicants that—
- (1) house the preapprenticeship or apprenticeship programs in an institution of higher education that includes basic science and math education in the curriculum of the institution of higher education:
- (2) work with the Secretary of Defense and the Secretary of Veterans Affairs or veteran service organizations recognized by the Secretary of Veterans Affairs under section 5902 of title 38, United States Code, to transition members of the Armed Forces and veterans to careers in the energy sector;
 - (3) work with-
 - (A) Indian tribes:
 - (B) tribal organizations; and
- (C) Native American veterans (as defined in section 3765 of title 38, United States Code), including veterans who are descendants of Natives (as defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602));
- (4) apply as a State or regional consortia to leverage best practices already available in the State or region in which an institution of higher education is located;
- (5) have a State-supported entity included in the consortium applying for the grant;
- (6) provide support services and career coaching:
- (7) provide introductory energy workforce development training;
- (8) work with minority-serving institutions to provide job training to increase the number of skilled minorities and women in the energy sector; or
- (9) provide job training for displaced and unemployed workers in the energy sector.
- (f) ADDITIONAL CONSIDERATION.—In making grants under this section, the Secretary shall consider regional diversity.
- (g) LIMITATION ON APPLICATIONS.—An eligible entity may not submit, either individually or as part of a joint application, more than 1 application for a grant under this section during any 1 fiscal year.
- (h) LIMITATIONS ON AMOUNT OF GRANT.— The amount of an individual grant for any 24-month period shall not exceed \$500,000.
- (i) FEDERAL SHARE.—The Federal share of the cost of a preapprenticeship or apprenticeship program carried out using a grant under this section shall be not greater than 50 percent.
- (j) REPORT.—Not later than 1 year after the date on which the first grant is awarded under this section, and annually thereafter for 5 years, the Secretary shall submit to Congress and make publicly available on the website of the Department a report on the pilot program established under this section, including a description of—
 - (1) the entities receiving grants;
- (2) the activities carried out using the grants;
- (3) best practices used to leverage the investment of the Federal Government; and
- (4) an assessment of the results achieved by the pilot program, including the rate of employment at the National Laboratories for participants after completing a preapprenticeship or apprenticeship program carried out using a grant awarded under this section.
- (k) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$5,000,000 for each of fiscal years 2021 through 2025.

SEC. 2306. CLEAN ENERGY WORKFORCE PILOT PROGRAM.

- (a) DEFINITIONS.—In this section:
- (1) COMMUNITY PARTNERSHIP.—The term "community partnership" includes a non-profit organization or qualified youth or conservation corps that provides training to individuals to work for an eligible entity that is a business, or works on behalf of an eligible entity that is a business.
- (2) ELIGIBLE ENTITY.—The term "eligible entity" means a business, labor organization, or community partnership that—
- (A)(i) is directly involved with energy efficiency, renewable energy technology, or reduction in greenhouse gas emissions, as determined by the Secretary of Labor in consultation with the Secretary; or
- (ii) works on behalf of a business or community partnership that is directly involved with energy efficiency, renewable energy technology, or reduction in greenhouse gas emissions, as determined by the Secretary of Labor in consultation with the Secretary:
 - (B) provides services related to—
- (i) energy efficiency and renewable energy technology deployment and maintenance;
- (ii) grid modernization; or
- (iii) reduction in greenhouse gas emissions through the use of other low-carbon technologies.
- (3) PILOT PROGRAM.—The term "pilot program" means the pilot program established under subsection (b).
- (b) ESTABLISHMENT.—The Secretary of Labor, in consultation with the Secretary and in accordance with section 169(b) of the Workforce Innovation and Opportunity Act (29 U.S.C. 3224(b)), shall establish a pilot program to provide competitively awarded cost-shared grants to eligible entities to pay for—
- (1) on-the-job training of a new or existing employee to work—
- (A) in renewable energy, energy efficiency, or grid modernization; or
- (B) on the reduction of greenhouse gas emissions; or
- (2) preapprenticeship programs that provide a direct pathway to a career working—
- (A) in renewable energy, energy efficiency, or grid modernization; or
- $\left(B\right)$ on the reduction of greenhouse gas emissions.
 - (c) GRANTS.-
- (1) IN GENERAL.—An eligible entity desiring a grant under the pilot program shall submit to the Secretary of Labor an application at such time, in such manner, and containing such information as the Secretary of Labor may require.
- (2) PRIORITY FOR TARGETED COMMUNITIES.— In providing grants under the pilot program, the Secretary of Labor, in consultation with the Secretary shall give priority to an eligible entity that—
 - (A) recruits employees-
- (i) from the 1 or more communities that are served by the eligible entity; and
- (ii) that are minorities, women, veterans, or individuals who are transitioning from fossil energy sector jobs;
- (B) provides trainees with the opportunity to obtain real-world experience;
- (C) has fewer than 100 employees; and
- (D) in the case of a preapprenticeship program, demonstrates—
 - (i) a multi-year record of—
- (I) successfully recruiting minorities, women, and veterans for training; and
- (II) supporting those individuals in the successful completion of the preapprenticeship program; and
- (ii) a successful multi-year record of placing the majority of the graduates of the preapprenticeship program into apprenticeship programs.
 - (3) USE OF GRANT FOR FEDERAL SHARE.—

- (A) IN GENERAL.—An eligible entity shall use a grant received under the pilot program to pay the Federal share of the cost of—
- (i) providing on-the-job training for an employee, in accordance with subparagraph (B); or
- (ii) in the case of a preapprenticeship program—
- (I) recruiting minorities, women, and veterans for training;
- (II) supporting those individuals in the successful completion of the preapprenticeship program; and
- (III) carrying out any other activity of the preapprenticeship program, as determined to be appropriate by the Secretary of Labor, in consultation with the Secretary.
- (B) FEDERAL SHARE AMOUNT.—The Federal share described in subparagraph (A) shall not exceed—
- (i) for activities described in clause (i) of that subparagraph—
- (I) in the case of an eligible entity with 20 or fewer employees, 45 percent of the cost of on-the-job-training for an employee;
- (II) in the case of an eligible entity with not fewer than 21 employees and not more than 99 employees, 37.5 percent of the cost of on-the-job-training for an employee; and
- (III) in the case of an eligible entity with not fewer than 100 employees, 25 percent of the cost of on-the-job-training for an employee; and
- (ii) for activities described in clause (ii) of that subparagraph, 50 percent.
- (4) Employer payment of non-federal share —
- (A) IN GENERAL.—The non-Federal share of the cost of providing on-the-job training for an employee under a grant received under the pilot program shall be paid in cash or in kind by the employer of the employee receiving the training.
- (B) INCLUSIONS.—The non-Federal share described in subparagraph (A)(i) may include the amount of wages paid by the employer to the employee during the time that the employee is receiving on-the-job training, as fairly evaluated by the Secretary of Labor.
- (5) Grant amount.—An eligible entity may not receive more than \$100,000 per fiscal year in grant funds under the pilot program.
- (d) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section \$15,000,000 for each of fiscal years 2021 through 2023.

SEC. 2307. ENERGY-READY VETS PROGRAM.

- (a) DEFINITIONS.—In this section:
- (1) ACTIVE MILITARY, NAVAL, OR AIR SERVICE.—The term "active military, naval, or air service" has the meaning given such term in section 101 of title 38, United States Code.
- (2) ELIGIBLE PARTICIPANT.—The term "eligible participant" means a veteran who—
- (A) was discharged or released from service in the active military, naval, or air service during the most recent 1-year period; or
- (B)(i) was discharged or released from service in the active military, naval, or air service during the 2-year period immediately preceding the most recent 1-year period; and
- (ii) receives the approval of the Secretary to participate in the program.
- (3) PROGRAM.—The term "program" means the Energy-Ready Vets Program established under subsection (b)(1).
- (4) UNIFORMED SERVICES.—The term "uniformed services" has the meaning given such term in section 10(a) of title 10, United States Code.
- (5) VETERAN.—The term "veteran" has the meaning given such term in section 101 of title 38, United States Code.
- (b) ESTABLISHMENT; IMPLEMENTATION.—
- (1) ESTABLISHMENT.—The Secretary shall establish a program, to be known as the "En-

- ergy-Ready Vets Program", to prepare eligible participants for careers in the energy industry.
- (2) IMPLEMENTATION.—The Secretary shall ensure that the program is implemented by an administrator, to be appointed by the Secretary from among individuals with experience relating to military service.
 - (c) Administration of Program.
- (1) IN GENERAL.—The Secretary, in partnership with the Secretary of Defense, shall carry out the program through the SkillBridge program of the Department of Defense, under which the Secretary shall provide standardized training courses, based, to the maximum extent practicable, on existing industry-recognized certification and training programs, to prepare eligible participants in the program for careers in the energy industry, including—
- (A) careers in low-carbon emissions sectors of the energy industry, including the solar sector, the wind sector, and other sectors identified by the Secretary;
- (B) careers in the cybersecurity sector of the energy industry, including careers in—
 - (i) cybersecurity preparedness;
- (ii) cyber incident response and recovery;
- (iii) grid modernization, security, and maintenance; and
 - (iv) resilience planning; and
- (C) careers in sectors that plan, develop, construct, maintain, and expand energy industry infrastructure.
 - (2) PROGRAM REQUIREMENTS.—
- (A) IN GENERAL.—In carrying out the program, the Secretary shall ensure that the courses described in paragraph (1)
 - ourses described (i) provide—
 - (I) job training;
- (II) employment skills training, including providing comprehensive wraparound support services to eligible participants that—
- (aa) enhance the training experience and promote the professional development of eligible participants; and
- (bb) help eligible participants transition into the workforce: and
- (III) opportunities for internships of not longer than 180 days; and
 - (ii) are carried out primarily through—
 - (I) internships; or
 - (II) applied, work-based training.
- (B) EXAM REQUIREMENT.—As a requirement for completing a course described in paragraph (1), the Secretary shall require each eligible participant in the course to earn an applicable industry-recognized entry-level certificate or other credential.

SEC. 2308. WIND WORKFORCE TRAINING GRANT PROGRAM.

(a) IN GENERAL.—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) is amended by adding at the end the following:

"SEC. 1107. WIND WORKFORCE TRAINING GRANT PROGRAM.

- "(a) DEFINITION OF ELIGIBLE ENTITY.—In this section, the term 'eligible entity' means a community college, technical school, institution of higher education, or labor organization that offers an onshore or offshore wind training program.
- "(b) Grant Program.—The Secretary shall establish a program under which the Secretary shall award grants, on a competitive basis, to eligible entities—
- "(1) to purchase large pieces of wind component equipment (such as nacelles, towers, and blades) or installation equipment for use in training wind industry students;
- "(2) to conduct occupational skills training, including on-the-job training, safety and health training, and classroom training;
- "(3) for incumbent worker and career ladder training and retraining, including skill upgrading;
- "(4) for individual referral and tuition assistance for a training program offered by a

nonprofit organization through which an individual may attain a recognized postsecondary credential (as defined in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102)):

"(5) for customized training in conjunction with an existing registered apprenticeship program, internship, or labor-management partnership; and

"(6) for other activities that the Secretary determines meet the purposes of this section.

"(c) PRIORITY.—In awarding grants under this section, the Secretary shall give priority to eligible entities that—

"(1) have formed partnerships with other eligible entities;

"(2) have entered into a memorandum of understanding with an employer in the onshore or offshore wind industry to foster workforce development; or

``(3) will use the grant funds to assist individuals who are—

"(A) dislocated workers, with a focus on workers displaced from the offshore oil and gas, onshore fossil fuel, nuclear energy, or fishing industry; or

"(B) individuals with a barrier to employment

"(d) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out this section \$5,000,000 for each of fiscal years 2021 through 2025.".

(b) CLERICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 601) is amended by inserting after the item relating to section 1106 the following:

"Sec. 1107. Wind workforce training grant program.".

SEC. 2309. VETERANS IN WIND ENERGY.

(a) IN GENERAL.—Title XI of the Energy Policy Act of 2005 (42 U.S.C. 16411 et seq.) (as amended by section 2308(a)) is amended by adding at the end the following:

"SEC. 1108. VETERANS IN WIND ENERGY.

"(a) IN GENERAL.—The Secretary shall establish a program to prepare veterans for careers in the wind energy industry that shall be modeled off of the Solar Ready Vets pilot program formerly administered by the Department of Energy and the Department of Defense.

"(b) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out this section \$2,000,000 for each of fiscal years 2021 through 2025.".

(b) CLERICAL AMENDMENT.—The table of contents for the Energy Policy Act of 2005 (Public Law 109-58; 119 Stat. 601) (as amended by section 2308(b)) is amended by inserting after the item relating to section 1107 the following:

"Sec. 1108. Veterans in wind energy."

SEC. 2310. STUDY AND REPORT ON WIND WORK-FORCE.

(a) IN GENERAL.—The Secretary shall convene a task force comprised of 1 or more representatives of each of the stakeholders described in subsection (b) that shall—

(1) conduct a study to assess the needs of the offshore and onshore wind industry workforce, including supply chain and support vessels; and

(2) create a comprehensive list that—

(A) lists each type of position related to the onshore and offshore wind energy industry available in the United States;

(B) identifies existing gaps in the offshore and onshore wind industry workforce, including supply chain and support vessels; and

(C) describes the skill sets required for each type of position listed under subparagraph (A).

(b) STAKEHOLDERS DESCRIBED.—The stakeholders referred to in subsection (a) are representatives of—

- (1) the Department of Defense;
- (2) the Department of Education;

(3) the Department;

(4) the Department of Labor;

(5) the Department of Veterans Affairs;(6) technical schools, community colleges,

and institutions of higher education that have wind workforce training programs;

- (7) State and local governments;
- (8) ports;
- (9) vessel operators;
- (10) labor organizations;
- (11) nonprofit organizations; and
- (12) the wind industry.

(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall make publicly available and submit to Congress a report that—

(1) describes the results of the study conducted under subsection (a)(1);

(2) includes the comprehensive list described in subsection (a)(2); and

(3) provides recommendations—

(A) for creating a credentialing program that may be administered by community colleges, technical schools, and other training institutions or organizations; and

(B) that reflect best practices for wind workforce training programs, as identified by the stakeholders described in subsection (b).

(d) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary to carry out this subsection \$500.000.

TITLE III—CODE MAINTENANCE

SEC. 3001. REPEAL OF OFF-HIGHWAY MOTOR VEHICLES STUDY.

(a) REPEAL.—Part I of title III of the Energy Policy and Conservation Act (42 U.S.C. 6373) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy and Conservation Act (Public Law 94–163; 89 Stat. 871) is amended—

(1) by striking the item relating to part I of title III; and

(2) by striking the item relating to section

SEC. 3002. REPEAL OF METHANOL STUDY.

Section 400EE of the Energy Policy and Conservation Act (42 U.S.C. 6374d) is amend-

(1) by striking subsection (a); and

(2) by redesignating subsections (b) and (c) as subsections (a) and (b), respectively.

SEC. 3003. REPEAL OF STATE UTILITY REGULATORY ASSISTANCE.

(a) REPEAL.—Section 207 of the Energy Conservation and Production Act (42 U.S.C. 6807) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Conservation and Production Act (Public Law 94–385; 90 Stat. 1126) is amended by striking the item relating to section 207.

SEC. 3004. REPEAL OF AUTHORIZATION OF AP-PROPRIATIONS PROVISION.

(a) REPEAL.—Section 208 of the Energy Conservation and Production Act (42 U.S.C. 6808) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Conservation and Production Act (Public Law 94-385; 90 Stat. 1126) is amended by striking the item relating to section 208.

SEC. 3005. REPEAL OF RESIDENTIAL ENERGY EFFICIENCY STANDARDS STUDY.

(a) REPEAL.—Section 253 of the National Energy Conservation Policy Act (42 U.S.C. 8232) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 253.

SEC. 3006. REPEAL OF WEATHERIZATION STUDY.

(a) REPEAL.—Section 254 of the National Energy Conservation Policy Act (42 U.S.C. 8233) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 254.

SEC. 3007. REPEAL OF REPORT TO CONGRESS.

(a) REPEAL.—Section 273 of the National Energy Conservation Policy Act (42 U.S.C. 8236b) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended by striking the item relating to section 273.

SEC. 3008. REPEAL OF SURVEY OF ENERGY SAV-ING POTENTIAL.

- (a) REPEAL.—Section 550 of the National Energy Conservation Policy Act (42 U.S.C. 8258b) is repealed.
 - (b) Conforming Amendments.—

(1) The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206; 106 Stat. 2851) is amended by striking the item relating to section 550

(2) Section 543(d)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8253(d)(2)) is amended by striking ", incorporating any relevant information obtained from the survey conducted pursuant to section 550".

SEC. 3009. REPEAL OF REPORT BY GENERAL SERVICES ADMINISTRATION.

- (a) REPEAL.—Section 154 of the Energy Policy Act of 1992 (42 U.S.C. 8262a) is repealed.
 - (b) Conforming Amendments.—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 154.

(2) Section 159 of the Energy Policy Act of 1992 (42 U.S.C. 8262e) is amended by striking subsection (c).

SEC. 3010. REPEAL OF INTERGOVERNMENTAL EN-ERGY MANAGEMENT PLANNING AND COORDINATION WORKSHOPS.

(a) REPEAL.—Section 156 of the Energy Policy Act of 1992 (42 U.S.C. 8262b) is repealed.

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102–486; 106 Stat. 2776) is amended by striking the item relating to section 156.

SEC. 3011. REPEAL OF INSPECTOR GENERAL AUDIT SURVEY AND PRESIDENT'S COUNCIL ON INTEGRITY AND EFFICIENCY REPORT TO CONGRESS.

(a) REPEAL.—Section 160 of the Energy Policy Act of 1992 (42 U.S.C. 8262f) is amended by striking the section designation and heading and all that follows through "(c) INSPECTOR GENERAL REVIEW.—Each Inspector General" and inserting the following:

"SEC. 160. INSPECTOR GENERAL REVIEW.

"Each Inspector General".

(b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 160 and inserting the following:

"Sec. 160. Inspector General review."

SEC. 3012. REPEAL OF PROCUREMENT AND IDEN-TIFICATION OF ENERGY EFFICIENT PRODUCTS PROGRAM.

- (a) REPEAL.—Section 161 of the Energy Policy Act of 1992 (42 U.S.C. 8262g) is repealed.
- (b) Conforming Amendments.—

(1) The table of contents for the Energy Policy Act of 1992 (Public Law 102–486; 106 Stat. 2776) is amended by striking the item relating to section 161.

(2) Section 548(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) (as amended by section 1033(a)) is amended—

- (A) in paragraph (3), by inserting "and" after the semicolon at the end;
 - (B) by striking paragraph (4); and
- (C) by redesignating paragraph (5) as paragraph (4).

SEC. 3013. REPEAL OF PHOTOVOLTAIC ENERGY PROGRAM.

- (a) REPEAL.—Part 4 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8271 et seq.) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206) is amended—
- (1) by striking the item relating to part 4 of title V; and
- (2) by striking the items relating to sections 561 through 570.

SEC. 3014. REPEAL OF NATIONAL ACTION PLAN FOR DEMAND RESPONSE.

- (a) REPEAL.—Part 5 of title V of the National Energy Conservation Policy Act (42 U.S.C. 8279) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the National Energy Conservation Policy Act (Public Law 95-619; 92 Stat. 3206; 121 Stat. 1665) is amended—
- (1) by striking the item relating to part 5 of title V; and
- (2) by striking the item relating to section 571.

SEC. 3015. REPEAL OF ENERGY AUDITOR TRAINING AND CERTIFICATION.

- (a) REPEAL.—Subtitle F of title V of the Energy Security Act (42 U.S.C. 8285 et seq.) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Security Act (Public Law 96-294; 94 Stat. 611) is amended—
- (1) by striking the item relating to subtitle F of title V; and
- (2) by striking the items relating to sections 581 through 584.

SEC. 3016. REPEAL OF NATIONAL COAL POLICY STUDY.

- (a) REPEAL.—Section 741 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8451) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 741.

SEC. 3017. REPEAL OF STUDY ON COMPLIANCE PROBLEM OF SMALL ELECTRIC UTILITY SYSTEMS.

- (a) REPEAL.—Section 744 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8454) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 744.

SEC. 3018. REPEAL OF STUDY OF SOCIO-ECONOMIC IMPACTS OF INCREASED COAL PRODUCTION AND OTHER EN-ERGY DEVELOPMENT.

- (a) REPEAL.—Section 746 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8456) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 746.

SEC. 3019. REPEAL OF STUDY OF THE USE OF PE-TROLEUM AND NATURAL GAS IN COMBUSTORS.

- (a) REPEAL.—Section 747 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8457) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 747.

SEC. 3020. REPEAL OF AUTHORIZATION OF APPROPRIATIONS.

- (a) REPEAL.—Subtitle F of title VII of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8461) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95–620; 92 Stat. 3289) is amended—
- (1) by striking the item relating to subtitle F of title VII; and
- (2) by striking the item relating to section 751.

SEC. 3021. REPEAL OF SUBMISSION OF REPORTS.

- (a) REPEAL.—Section 807 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8483) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 807.

SEC. 3022. REPEAL OF ELECTRIC UTILITY CON-SERVATION PLAN.

- (a) REPEAL.—Section 808 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8484) is repealed.
 - (b) Conforming Amendments.—
- (1) TABLE OF CONTENTS.—The table of contents for the Powerplant and Industrial Fuel Use Act of 1978 (Public Law 95-620; 92 Stat. 3289) is amended by striking the item relating to section 808.
- (2) REPORT ON IMPLEMENTATION.—Section 712 of the Powerplant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8422) is amended—
 - (A) by striking "(a) GENERALLY.—"; and
 - (B) by striking subsection (b).

SEC. 3023. EMERGENCY ENERGY CONSERVATION REPEALS.

- (a) Repeals.—
- (1) Section 201 of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8501) is amended by striking the section designation and heading and all that follows through "(b) PURPOSES.—The purposes" and inserting the following:

"SEC. 201. PURPOSES.

- "The purposes"
- (2) Part B of title II of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8521 et seq.) is repealed.
- (3) Section 241 of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8531) is repealed.
- (b) Conforming Amendments.—
- (1) The table of contents for the Emergency Energy Conservation Act of 1979 (Public Law 96–102; 93 Stat. 749) is amended—
- (A) by striking the item relating to section 201 and inserting the following: "Sec. 201. Purposes.":
- (B) by striking the item relating to part B of title II; and
- (C) by striking the items relating to sections 221, 222, and 241.
- (2) Section 251(b) of the Emergency Energy Conservation Act of 1979 (42 U.S.C. 8541(b)) is amended—
- (A) by striking "or 221" each place it appears; and

(B) by striking "(as the case may be)". SEC. 3024. ENERGY SECURITY ACT REPEALS.

- (a) BIOMASS ENERGY DEVELOPMENT PLANS.—Subtitle A of title II of the Energy Security Act (42 U.S.C. 8811 et seq.) is repealed.
- (b) MUNICIPAL WASTE BIOMASS ENERGY.—Subtitle B of title II of the Energy Security Act (42 U.S.C. 8831 et seq.) is repealed.
- (c) USE OF GASOHOL IN FEDERAL MOTOR VEHICLES.—Section 271 of the Energy Security Act (42 U.S.C. 8871) is repealed.
 - (d) Conforming Amendments.—
- (1) The table of contents for the Energy Security Act (Public Law 96–294; 94 Stat. 611) is amended—

- (A) by striking the items relating to subtitle A of title II;
- (B) by striking the items relating to subtitle B of title II;
- (C) by striking the item relating to section 204 and inserting the following:
- "Sec. 204. Funding."; and
- (D) by striking the item relating to section 271.
- (2) Section 203 of the Biomass Energy and Alcohol Fuels Act of 1980 (42 U.S.C. 8802) is amended—
 - (A) by striking paragraph (16); and
- (B) by redesignating paragraphs (17) through (19) as paragraphs (16) through (18), respectively.
- (3) Section 204 of the Energy Security Act (42 U.S.C. 8803) is amended—
- (A) in the section heading, by striking "FOR SUBTITLES A AND B"; and
- (B) in subsection (a)—
- (i) in paragraph (1), by adding "and" after the semicolon at the end;
- (ii) in paragraph (2), by striking "; and" at the end and inserting a period; and
- (iii) by striking paragraph (3).

SEC. 3025. NUCLEAR SAFETY RESEARCH, DEVEL-OPMENT, AND DEMONSTRATION ACT OF 1980 REPEALS.

Sections 5 and 6 of the Nuclear Safety Research, Development, and Demonstration Act of 1980 (42 U.S.C. 9704, 9705) are repealed.

SEC. 3026. REPEAL OF RENEWABLE ENERGY AND ENERGY EFFICIENCY TECHNOLOGY COMPETITIVENESS ACT OF 1989.

- (a) REPEAL.—The Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989 (42 U.S.C. 12001 et seq.) is repealed.
 - (b) Conforming Amendments.—
- (1) Section 6(b)(3) of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5905(b)(3)) (as amended by section 1205(c)(2)) is amended—
- (A) in subparagraph (P), by adding "and" after the semicolon:
 - (B) by striking subparagraph (Q); and
- (C) by redesignating subparagraph (R) as subparagraph (Q).
- (2) Section 1204 of the Energy Policy Act of 1992 (42 U.S.C. 13313) is amended—
- (A) in subsection (b), in the matter preceding paragraph (1), in the first sentence, by striking ", in consultation with" and all that follows through "under section 6 of the Renewable Energy and Energy Efficiency Technology Competitiveness Act of 1989,"; and
- (B) in subsection (c), by striking ", in consultation with the Advisory Committee,".

SEC. 3027. REPEAL OF HYDROGEN RESEARCH, DEVELOPMENT, AND DEMONSTRATION PROGRAM.

The Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 (42 U.S.C. 12401 et seq.) is repealed.

SEC. 3028. REPEAL OF STUDY ON ALTERNATIVE FUEL USE IN NONROAD VEHICLES AND ENGINES.

- (a) IN GENERAL.—Section 412 of the Energy Policy Act of 1992 (42 U.S.C. 13238) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 412

SEC. 3029. REPEAL OF LOW INTEREST LOAN PRO-GRAM FOR SMALL BUSINESS FLEET PURCHASES.

- (a) IN GENERAL.—Section 414 of the Energy Policy Act of 1992 (42 U.S.C. 13239) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992

(Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 414.

SEC. 3030. REPEAL OF TECHNICAL AND POLICY ANALYSIS FOR REPLACEMENT FUEL DEMAND AND SUPPLY INFORMA-TION.

- (a) IN GENERAL.—Section 506 of the Energy Policy Act of 1992 (42 U.S.C. 13256) is repealed.
 - (b) Conforming Amendments.—
- (1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 506.
- (2) Section 507(m) of the Energy Policy Act of 1992 (42 U.S.C. 13257(m)) is amended by striking "and section 506".

SEC. 3031. REPEAL OF 1992 REPORT ON CLIMATE CHANGE.

- (a) IN GENERAL.—Section 1601 of the Energy Policy Act of 1992 (42 U.S.C. 13381) is repealed.
- (b) Conforming Amendments.—
- (1) The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 1601
- (2) Section 1602(a) of the Energy Policy Act of 1992 (42 U.S.C. 13382(a)) is amended, in the matter preceding paragraph (1), in the third sentence, by striking "the report required under section 1601 and".

SEC. 3032. REPEAL OF DIRECTOR OF CLIMATE PROTECTOR ESTABLISHMENT.

- (a) IN GENERAL.—Section 1603 of the Energy Policy Act of 1992 (42 U.S.C. 13383) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 1603

SEC. 3033. REPEAL OF 1994 REPORT ON GLOBAL CLIMATE CHANGE EMISSIONS.

- (a) IN GENERAL.—Section 1604 of the Energy Policy Act of 1992 (42 U.S.C. 13384) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102–486; 106 Stat. 2776) is amended by striking the item relating to section 1604.

SEC. 3034. REPEAL OF TELECOMMUTING STUDY.

- (a) IN GENERAL.—Section 2028 of the Energy Policy Act of 1992 (42 U.S.C. 13438) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 2028.

SEC. 3035. REPEAL OF ADVANCED BUILDINGS FOR 2005 PROGRAM.

- (a) IN GENERAL.—Section 2104 of the Energy Policy Act of 1992 (42 U.S.C. 13454) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 2104.

SEC. 3036. REPEAL OF ENERGY RESEARCH, DE-VELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION ADVI-SORY BOARD.

- (a) IN GENERAL.—Section 2302 of the Energy Policy Act of 1992 (42 U.S.C. 13522) is repealed.
 - (b) Conforming Amendments.—
- (1) The table of contents for the Energy Policy Act of 1992 (Public Law 102–486; 106 Stat. 2776) is amended by striking the item relating to section 2302.
- (2) Section 6 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5905) is amended—

- (A) in subsection (a), in the matter preceding paragraph (1), in the first sentence, by striking ", in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992.":
- (B) in subsection (b)—
- (i) in paragraph (1), in the first sentence, by striking ", in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992,"; and
- (ii) in paragraph (2), in the second sentence, by striking ", in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992."; and
- (C) in subsection (c), in the first sentence, by striking ", in consultation with the Advisory Board established under section 2302 of the Energy Policy Act of 1992.".
- (3) Section 2011(c) of the Energy Policy Act of 1992 (42 U.S.C. 13411(c)) is amended, in the second sentence, by striking ", and with the Advisory Board established under section 2302".
- (4) Section 2304 of the Energy Policy Act of 1992 (42 U.S.C. 13523), is amended—
- (A) in subsection (a), by striking ", in consultation with the Advisory Board established under section 2302,"; and
- (B) in subsection (c), in the matter preceding paragraph (1), in the first sentence, by striking ", with the advice of the Advisory Board established under section 2302 of this Act."

SEC. 3037. REPEAL OF STUDY ON USE OF ENERGY FUTURES FOR FUEL PURCHASE.

- (a) IN GENERAL.—Section 3014 of the Energy Policy Act of 1992 (42 U.S.C. 13552) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 3014.

SEC. 3038. REPEAL OF ENERGY SUBSIDY STUDY.

- (a) In General.—Section 3015 of the Energy Policy Act of 1992 (42 U.S.C. 13553) is repealed.
- (b) CONFORMING AMENDMENT.—The table of contents for the Energy Policy Act of 1992 (Public Law 102-486; 106 Stat. 2776) is amended by striking the item relating to section 3015.

SEC. 3039. ELIMINATION AND CONSOLIDATION OF CERTAIN AMERICA COMPETES PRO-GRAMS.

- (a) ELIMINATION OF PROGRAM AUTHORITIES.—
- (1) NUCLEAR SCIENCE TALENT EXPANSION PROGRAM FOR INSTITUTIONS OF HIGHER EDUCATION.—Section 5004 of the America COMPETES Act (42 U.S.C. 16532) is repealed.
- (2) HYDROCARBON SYSTEMS SCIENCE TALENT EXPANSION PROGRAM FOR INSTITUTIONS OF HIGHER EDUCATION.—Section 5005 of the America COMPETES Act (42 U.S.C. 16533) is amended—
 - (A) by striking subsection (e); and
 - (B) in subsection (f)—
 - (i) by striking paragraph (2);
- (ii) by striking the subsection designation and heading and all that follows through "There are" in paragraph (1) and inserting the following:
- "(e) AUTHORIZATION OF APPROPRIATIONS.—There are"; and
- (iii) by redesignating subparagraphs (A) through (F) as paragraphs (1) through (6), respectively, and indenting appropriately.
- (3) DISCOVERY SCIENCE AND ENGINEERING INNOVATION INSTITUTES.—Section 5008 of the America COMPETES Act (42 U.S.C. 16535) is repealed.
- (4) ELIMINATION OF DUPLICATIVE AUTHORITY FOR EDUCATION PROGRAMS.—Sections 3181 and 3185 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 73811, 42 U.S.C. 7381n) are repealed.

- (5) MENTORING PROGRAM.—Section 3195 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381r) is renealed
- (b) Repeal of Authorizations.-
- (1) DEPARTMENT OF ENERGY EARLY CAREER AWARDS FOR SCIENCE, ENGINEERING, AND MATHEMATICS RESEARCHERS.—Section 5006 of the America COMPETES Act (42 U.S.C. 16534) is amended by striking subsection (h).
- (2) PROTECTING AMERICA'S COMPETITIVE EDGE (PACE) GRADUATE FELLOWSHIP PROGRAM.—Section 5009 of the America COMPETES Act (42 U.S.C. 16536) is amended by striking subsection (f).
- (3) DISTINGUISHED SCIENTIST PROGRAM.— Section 5011 of the America COMPETES Act (42 U.S.C. 16537) is amended by striking subsection (j).
- (c) Consolidation of Duplicative Program Authorities.—
- (1) UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.—Section 954 of the Energy Policy Act of 2005 (42 U.S.C. 16274) (as amended by section 1504(a)) is amended in subsection (a)—
- (A) in paragraph (1), by inserting "nuclear chemistry," after "nuclear engineering,"; and
 - (B) in paragraph (2)—
- (i) by redesignating subparagraphs (C) through (E) as subparagraphs (D) through (F), respectively; and
- (ii) by inserting after subparagraph (B) the following:
- "(C) award grants, not to exceed 5 years in duration, to institutions of higher education with existing academic degree programs in nuclear sciences and related fields—
- "(i) to increase the number of graduates in nuclear science and related fields;
- "(ii) to enhance the teaching and research of advanced nuclear technologies;
- "(iii) to undertake collaboration with industry and National Laboratories; and
- "(iv) to bolster or sustain nuclear infrastructure and research facilities of institutions of higher education, such as research and training reactors and laboratories;".
- (2) CONSOLIDATION OF DEPARTMENT OF ENERGY EARLY CAREER AWARDS FOR SCIENCE, ENGINEERING, AND MATHEMATICS RESEARCHERS PROGRAM AND DISTINGUISHED SCIENTIST PROGRAM.—
- (A) FUNDING.—Section 971(c) of the Energy Policy Act of 2005 (42 U.S.C. 16311(c)) is amended by adding at the end the following:
- "(8) For the Department of Energy early career awards for science, engineering, and mathematics researchers program under section 5006 of the America COMPETES Act (42 U.S.C. 16534) and the distinguished scientist program under section 5011 of that Act (42 U.S.C. 16537), \$150,000,000 for each of fiscal years 2018 through 2022, of which not more than 65 percent of the amount made available for a fiscal year under this paragraph may be used to carry out section 5006 or 5011 of that Act."
- (B) DEPARTMENT OF ENERGY EARLY CAREER AWARDS FOR SCIENCE, ENGINEERING, AND MATHEMATICS RESEARCHERS.—Section 5006 of the America COMPETES Act (42 U.S.C. 16534) is amended—
 - (i) in subsection (b)(1)—
- (I) in the matter preceding subparagraph (A)—
- (aa) by inserting "average" before "amount"; and
- (bb) by inserting "for each year" before "shall";
- (II) in subparagraph (A), by striking "\$80,000" and inserting "\$190,000"; and
- (III) in subparagraph (B), by striking "\$125,000" and inserting "\$490,000";
 - (ii) in subsection (c)(1)(C)-
- (I) in clause (i)—

- (aa) by striking "assistant professor or equivalent title" and inserting "untenured assistant or associate professor"; and
- (bb) by inserting "or" after the semicolon at the end;
 - (II) by striking clause (ii); and
- (III) by redesignating clause (iii) as clause iii);
- (iii) in subsection (d), by striking "on a competitive, merit-reviewed basis" and inserting "through a competitive process using merit-based peer review";
 - (iv) in subsection (e)-
- (I) by striking the subsection designation and heading and all that follows through "To be eligible" in paragraph (1) and inserting the following:
- "(e) SELECTION PROCESS AND CRITERIA.—To be eligible"; and
- (II) by striking paragraph (2); and
- (v) in subsection (f)(1), by striking "non-profit, nondegree-granting research organizations" and inserting "National Laboratories".
- (3) SCIENCE EDUCATION PROGRAMS.—Section 3164 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381a) is amended—
- (A) in subsection (b)—
- (i) by striking paragraphs (1) and (2) and inserting the following:
- "(1) IN GENERAL.—The Director of the Office of Science (referred to in this subsection as the 'Director') shall provide for appropriate coordination of science, technology, engineering, and mathematics education programs across all functions of the Department.
- "(2) ADMINISTRATION.—In carrying out paragraph (1), the Director shall—
 - "(A) consult with-
- "(i) the Assistant Secretary of Energy with responsibility for energy efficiency and renewable energy programs; and
- "(ii) the Deputy Administrator for Defense Programs of the National Nuclear Security Administration; and
- "(B) seek to increase the participation and advancement of women and underrepresented minorities at every level of science, technology, engineering, and mathematics education."; and
 - (ii) in paragraph (3)—
- (I) in subparagraph (D), by striking "and" at the end;
- (II) by redesignating subparagraph (E) as subparagraph (F); and
- (III) by inserting after subparagraph (D) the following:
- "(E) represent the Department as the principal interagency liaison for all coordination activities under the President for science, technology, engineering, and mathematics education programs; and"; and
 - (B) in subsection (d)—
- (i) by striking "The Secretary" and inserting the following:
- "(1) IN GENERAL.—The Secretary"; and
- (ii) by adding at the end the following:
- "(2) REPORT.—Not later than 180 days after the date of enactment of this paragraph, the Director shall submit a report describing the impact of the activities assisted with the Fund established under paragraph (1) to—
- "(A) the Committee on Science, Space, and Technology of the House of Representatives;
- ``(B) the Committee on Energy and Natural Resources of the Senate.".
- (4) PROTECTING AMERICA'S COMPETITIVE EDGE (PACE) GRADUATE FELLOWSHIP PROGRAM.—Section 5009 of the America COMPETES Act (42 U.S.C. 16536) is amended—
 - (A) in subsection (c)—
- (i) in paragraph (1) by striking ", involving" and all that follows through "Secretary"; and

- (ii) in paragraph (2), by striking subparagraph (B) and inserting the following:
- "(B) to demonstrate excellent academic performance and understanding of scientific or technical subjects; and";
- (B) in subsection (d)(1)(B)(i), by inserting "full or partial" before "graduate tuition"; and
- (C) in subsection (e), in the matter preceding paragraph (1), by striking "Director of Science, Engineering, and Mathematics Education" and inserting "Director of the Office of Science."
- (d) CONFORMING AMENDMENTS.—The table of contents for the America COMPETES ACT (Public Law 110-69; 121 Stat. 573) is amended by striking the items relating to sections 5004 and 5008.

SEC. 3040. REPEAL OF PRIOR LIMITATION ON COMPENSATION OF THE SECRETARY OF THE INTERIOR.

- (a) IN GENERAL.—The Joint Resolution entitled "Joint Resolution ensuring that the compensation and other emoluments attached to the office of Secretary of the Interior are those which were in effect on January 1, 2005", approved January 16, 2009 (5 U.S.C. 5312 note; Public Law 111-1), is repealed.
- (b) EFFECTIVE DATE.—This section shall take effect as though enacted on March 2, 2017.

CLOTURE MOTION

Mr. McCONNELL. Mr. President, I send a cloture motion to the desk for the substitute amendment No. 1407.

The PRESIDING OFFICER. The cloture motion having been presented under rule XXII, the Chair directs the clerk to read the motion.

The senior assistant legislative clerk read as follows:

CLOTURE MOTION

We, the undersigned Senators, in accordance with the provisions of rule XXII of the standing rules of the Senate, do hereby move to bring to a close debate on the amendment No. 1407, as modified, to Calendar No. 357, S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

Mitch McConnell, Chuck Grassley, John Barrasso, John Thune, Cindy Hyde-Smith, Mike Braun, Lindsey Graham, Shelley Moore Capito, Lamar Alexander, Thom Tillis, Mike Crapo, James E. Risch, Lisa Murkowski, John Hoeven, John Boozman, Steve Daines, Richard C. Shelby.

CLOTURE MOTION

Mr. McCONNELL. Mr. President, I send a cloture motion to the desk with the underlying bill, S. 2657.

The PRESIDING OFFICER. The cloture motion having been presented under rule XXII, the Chair directs the clerk to read the motion.

The senior assistant legislative clerk read as follows:

CLOTURE MOTION

We, the undersigned Senators, in accordance with the provisions of rule XXII of the standing rules of the Senate, do hereby move to bring to a close debate on Calendar No. 357, S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

Mitch McConnell, Chuck Grassley, John Barrasso, John Thune, Cindy Hyde-Smith, Mike Braun, Lindsey Graham, Shelley Moore Capito, Lamar Alexander, Thom Tillis, Mike Crapo, James E. Risch, Lisa Murkowski, John Hoeven, John Boozman, Steve Daines, Richard C. Shelby. The PRESIDING OFFICER. The Senator from Ohio.

AMENDMENT NO. 1514

(Purpose: To establish greater energy efficiency and cost-effectiveness in building codes.)

Mr. PORTMAN. Mr. President, I ask unanimous consent to call up amendment No. 1514 and ask that it be reported by number.

The PRESIDING OFFICER. The clerk will report.

The senior assistant legislative clerk read as follows:

The Senator from Ohio [Mr. PORTMAN] proposes an amendment numbered 1514.

(The amendment is printed in today's RECORD under "Text of Amendments.")

The PRESIDING OFFICER. The Senator from Ohio.

Mr. PORTMAN. Mr. President, Senator Shaheen and I are here today to report this amendment. This is simply language that is being reinserted back into the Energy bill that was taken out. I will say that it is clarifying language. We made some slight changes to clarify that there are no mandates in this legislation, and it has to do with ensuring that we have encouragement of energy efficiency in the single largest use of energy in our country, which are our residential homes and commercial buildings. So I appreciate the fact that Senator Shaheen is here on the floor. I yield to the Senator.

The PRESIDING OFFICER. The Senator from New Hampshire.

Mrs. SHAHEEN. Mr. President, Senator Portman and I have been working on this legislation for about 10 years now. It has gone through committee multiple times. It has gone through the floor of the Senate multiple times, and we hope that we have it in a position now where we can actually get this done as part of the overall energy package, which is significant and a tribute to the work of Senators Murkowski and Manchin and so many people in this Chamber.

As Senator Portman said, energy use in buildings is about 40 percent of our energy use. It is the biggest single sector in our economy. Energy efficiency is the cheapest, fastest way to deal with our energy needs. So what these provisions would do-they are voluntary. What they would do is provide significant savings to consumers. They would be the equivalent of taking every car and light truck off the road for a year, so significant emission savings and significant energy savings. This is a win-win. I hope that the amendment can be called up and passed.

Mr. PORTMAN. I thank my colleague, and I yield back.

The PRESIDING OFFICER. The Senator from Alaska.

TRIBUTE TO CHRISTOPHER JOHNSON, FRANK JOHNSON, ETHAN CAMILLE, AND TREY CAMILLE

Mr. SULLIVAN. Mr. President, it is Thursday afternoon, and it is the time I love to come down to the floor. It is one of my favorite times of the week because I get to talk about an Alaskan who has done something really, really important for their community, for their State, and for their country. I know the pages like the speech because I talk about stories in Alaska—the great State of Alaska and what is happening in the State right now. Sometimes I call this person the Alaskan of the Week. Usually, it is one person. Sometimes we fudge a little and recognize more than one person. Today we are going to recognize our Alaskans of the Week.

In any case, these are people who help their communities, help their country, and oftentimes do something that is unheralded, nobody knows about, very few know about, so I like to come down and tell the country about what they are doing. As you know, Alaska is a big State. It holds a lot of imagination for our Nation—the last frontier, with good reason, because we are filled with resilient people, some who have lived in Alaska for thousands and thousands of years, building communities in some of the most extreme weather environments on the planet, and they are tough, my constituents. They are also kind, and they make it through our tough win-

It is below zero in many, many parts of the State—well below zero. We make it through these winters through toughness, ingenuity, and, importantly, looking out for one another.

Last week, I highlighted a heroic Coast Guard rescuer, Evan Grills, in a real epic story for those who listened to it—what this young scout swimmer—rescue swimmer did in his first mission ever in the Coast Guard, something that people should remember for a long, long time.

This week, I am going to talk about another rescue mission—an only-in-Alaska mission—and I am going to recognize four extraordinary young Alaskans who stuck together, toughed it out, looked out for one another, and were rescued in another perilous situation. They are Christopher Johnson, age 14; Frank Johnson, age 8; Ethan Camille, age 7; and Trey Camille, 2 years old. All of them are alive and recovering because of their own ingenuity, determination, toughness, and looking out for one another. These four boys are from Nunam Iqua, a Yupik village 495 miles northwest of Anchor-

Home to about 200 people, this village is a close-knit Yupik community on the south fork of the Yukon River. A 2005 mission statement, written by community leaders and elders, describes the village like this: "a small quiet community of family, relatives, and friends working together [to pursue] our Yupik way of lifestyle with respect to our surrounding land and waters for subsistence."

Like many places in Alaska, temperatures there can be extreme, as they would be on February 2, when these four boys were rambunctiously playing

in the house. Irene, the grandmother of three and mother of one, was watching them that day. It was her birthday. As boys do, they were getting restless. They wanted to get outside. Irene, wanting to have them get some exercise and play, rightly encouraged them to get outside in the great outdoors, but the weather was turning a little bit ugly. Storms were in the forecast.

Irene later said:

They have to know how to be outside. They are tough Alaskan kids. There's always going to be a storm coming. Besides, their elders and their grandfather taught them to be prepared for the weather.

This is teaching from their grandparents and mothers and fathers.

So the four boys—Christopher, Frank, Ethan, and Trey—trudged outside to partake in one of the most popular winter hobbies we have in Alaska, snowmachining. Snowmachining is often referred to as snowmobiling by many Americans, but I am going to call it by its proper name, snowmachining. Due to a lack of road systems in our State, it also happens to be a primary mode of transportation during the winter months across dozens and dozens of villages throughout Alaska.

After they went riding around the small village, the boys were going to call it a day, when they spotted a fox. They spotted a fox. Like curious young boys do, the irresistible urge to trace this fox began, and they chased it out onto the tundra. Before they knew it, they lost the fox. The snowmachine was now stuck in the snow, and they were lost in a white blizzard. They were lost.

Chris, the 14-year-old—the oldest of the group, the leader—was determined to lift the snowmachine free of the snow. He lifted it so hard that it was later discovered he suffered a hernia. This is one tough kid.

Eventually, the machine unfortunately ran out of gas, and the young boys were miles and miles away from their village and lost. They began tracking through the deep snow in whiteout conditions in a direction they thought was the way back home.

At one point, one of the boys briefly took off his glove, which the wind promptly took away in the storm. Yet they continued walking and walking into winds as high as 60 miles per hour and wind chills way, way below zero.

After fighting the deep snow and whiteout conditions for 4 miles, Chris decided it was time to try to build a snow cave for shelter. That is a smart young man, knowing how to survive.

They did it. They built a shelter out of snow—a hole for them to crawl into and escape some of these most brutal wind gusts.

Now, a snow cave is only used as a last resort, but this was the last resort, and these young boys knew it. So they crawled in, and they huddled, and they waited for a rescue.

Back in the village, as you can imagine, the boys' family was getting fran-

tic. They called out to the community to help search for them, and that is what people did. All throughout the community, they couldn't be found. And then, as often happens in our State, the Coast Guard, the National Guard, and local search and rescue groups from neighboring villages were all activated—Alaskans throughout the State going to look for these four boys. It was all hands on deck.

Irene and Karen, one of the mothers, of three of them, were heartsick. Hours and hours went by. The whole State was holding its breath. It had been over 24 hours. The cold night fell. Around 2 a.m., the search and rescue was called off.

In the snow cave, however, these young, tough Alaskan boys continued to protect each other. Almost 20 miles away from home, they huddled. They tried to keep each other warm to keep each other alive.

Ethan didn't have a glove. Christopher was only wearing sweatpants, and they were particularly concerned for the 2-year-old, Trey. First, one of them crawled on top of Trey, but they were afraid that might be too much for him, so they created a kind of crisscross barrier to keep this young 2-year-old alive and warm as best they could.

The 8-year-old, Frank, refused to close his eyes throughout the night for fear of falling asleep and really never waking up. So he continuously stayed awake and poked the other boys throughout the night to keep them awake, which was successful.

The next morning, the storm had cleared, the sun started to come up, and the search throughout the State, with all of these other Alaskans looking for these four boys, continued. For hours and hours, the search team kept their eyes peeled for anything unusual on the tundra.

About 1 hour before the sun was going to go down again the next day, the search party from Scammon Bay—about 50 miles south—saw something. They knew how to read the tundra. They knew what a snow drift would look like, and this one looked different. Then they saw movement.

The search party investigated and came upon the four missing boys huddled and bundled together. Because it looked like one big mass, at first they didn't think any of the boys were alive, and then they realized what was going on. They were protecting the baby.

One of the rescuers, Herschel Sundown, told a reporter they were protecting Trey. The rescue team immediately got to work warming the boys up, and within 15 minutes, a Coast Guard helicopter—our brave men and women of the Coast Guard, always on the scene—quickly transported these boys, after picking them up, to a local hospital.

Ethan, the 7-year-old, is now recovering from severe frostbite on his hands, but all the kids are back at school and doing well.

The rescuer, Herschel Sundown said: [Honestly], I don't know how they survived. The will to survive in these young boys is amazing. I have never seen anything like [it].

Irene, the grandmother of the three and mother of one, is so very proud of them. She said: If I were to get lost in Alaska in the wilderness, I would want to be with these four boys. So would I.

She also asked for the prayers of the country for Ethan and for his hand to heal. And that is starting to happen.

These are the kind of young men and boys in Alaska who make us so unique, tough, and resourceful. They uplift us, and they make us proud. They are the protectors of their lands, their homes, and, importantly, each other.

To the rescue crews, thank you again for your hard work and perseverance and for risking your own lives for these young boys.

To Christopher, Frank, Ethan, and little 2-year-old Trey, thank you for your inspiration, for your ingenuity, for your toughness, and for being able to survive in the elements and looking out for each other. Thank you for staying alive and staying safe, and congratulations on being our Alaskans of the Week.

I yield the floor.

The PRESIDING OFFICER. The Senator from Florida.

Mr. SCOTT of Florida. Mr. President, first, I want to thank the Senator from Alaska for his "Alaskans of the Week" each week. I have had the opportunity to preside a few times when he recognizes the Alaskan of the Week, and the stories are unbelievable. The story last week of what the young man from the great State of Florida did up in Alaska was just remarkable.

So I say to the Senator, thank you for what you do.

Mr. SULLIVAN. Thank you.

SECURE U.S. BASES ACT

Mr. SCOTT of Florida. Mr. President, I speak today in honor of the three victims of the tragic terrorist attack that took place at Naval Air Station Pensacola on December 6, 2019.

Airman Mohammed Sameh Haitham, known to friends and family as "Mo," just 19 years old, from St. Petersburg, FL, was a great athlete who loved to make others laugh.

Ensign Joshua Kaleb Watson of Enterprise, AL, a 23-year-old natural-born leader and selfless volunteer, who lifted others up, died a hero after giving first responders information on the shooter's location while he was mortally wounded.

Airman Apprentice Cameron Scott Walters of Richmond Hill, GA, was just 21 years old, with a contagious smile, whose dream was to serve his country.

Our sailors and law enforcement officials showed heroism and bravery in the face of evil, as they ran toward the shooter that day, saving lives, and our first responders came to the first aid of those in need.

Following this attack, I promised to do everything possible to prevent a tragedy like this from happening again. I called for a hard reset of the entire foreign national's training program and for all Saudi nationals training in the United States to be sent home until the U.S. Department of Defense completed a thorough review.

We now know that 21 of the foreign military students were withdrawn from the program and returned to Saudi Arabia after an investigation found that they were engaged in dangerous activities, including accessing anti-American jihadists websites and child pornography.

Withdrawing these students was a positive step, but there are still more than 850 military students from Saudi Arabia who remain in the United States at 38 military installations in 17 States, and there are thousands of additional foreign nationals from countries around the world training at U.S. military basis across our great Nation.

I am not calling for an end to these programs. Our alliances around the world, including our longstanding relationship with Saudi Arabia, are invaluable in defending American national securities and our interests abroad. These programs play an important role, but we cannot put the lives of our military men and women at risk.

We need to make sure that our men and women in uniform are safe at all times, especially when they are training right here in the United States.

Today, I am proud to join with my colleague Senator Joni Ernst to introduce the Secure U.S. Bases Act, to make sure these programs are operated with American interests first and that our men and women in uniform are protected.

The Secure U.S. Bases Act does three things. First, it creates a new visa category for foreign military students training on U.S. bases, with restrictions on their travel and actions while they are in our country. Individuals who receive the new visa will be prohibited from possessing, acquiring, or using firearms, except for uses specifically required by their training program, and they will be under the continual oversight of their commander.

Second, the bill changes the application process and vetting requirements for foreign military students.

The application to train on U.S. bases will now require an official endorsement letter from the chief of intelligence of their home country, additional personal information, an in-person interview, and an extensive background check that will include a review of social media activity. The U.S. Director of National Intelligence will also be responsible for the final decision on whether to admit an applicant into this program.

Finally, the Secretary of Defense must develop a method for classifying relative risks by country and consider the overall risk profile of each country when making determinations of an applicant's eligibility. If a program could be implemented in another country instead of the United States, the Department should consider that when appropriate.

This terrorist should have never been allowed into our country, let alone on any American military base with easy access to military men and women. The Secure U.S. Bases Act makes sure foreign military students training at U.S. bases are thoroughly vetted and monitored and that our troops are protected and never have to experience a tragedy like this again.

I had the opportunity to serve in the U.S. Navy and can't imagine our military men and women feeling unsafe on their post. It is a place where they train and serve, where their families live—some on base and some off—and where they deserve to feel safe and secure.

I hope all my colleagues join me in this effort and keep our U.S. bases secure.

I yield the floor.

The PRESIDING OFFICER. The Senator from Texas.

SUPREME COURT

Mr. CORNYN. Mr. President, yesterday our colleague, the senior Senator from New York, headed across the street to join a pro-abortion rally outside the Supreme Court Building, where he made deeply disturbing comments about two of the Justices sitting on the Supreme Court. He said these words:

I want to tell you, Gorsuch. I want to tell you, Kavanaugh. You have released the whirlwind, and you will pay the price. You won't know what hit you if you go forward with these awful decisions.

He certainly didn't mince words. The minority leader of the U.S. Senate threatened two sitting Supreme Court Justices based on the potential outcome of a case they are considering. That is the only way to interpret what he said

It is no surprise to any of us that the Senator from New York is no fan of the two most recent additions on the Court, but a fiery floor speech and a downright threat of violence are two very different things.

We have heard some of our Democratic colleagues voice their misgivings about the Court, but no one, to my knowledge, has sunk so low as to threaten sitting Justices. As you would expect, the shock and outrage were immediate. Liberal legal scholar Laurence Tribe denounced Senator Schurence Tribe denounced Senator Schurence Tribe denounced senator schures arare public rebuke, calling the comments not only inappropriate but dangerous.

The simple end to this story would be that our colleague would apologize to Justice Gorsuch, Justice Kavanaugh, and to the American people, but instead of doing that, he has doubled down. His office has accused the Chief Justice somehow of bias and said Senator Schumer was referring to Republican lawmakers, not the Associate Justices, as if inciting violence against Republican lawmakers is somehow acceptable, too, in the wake of what happened to STEVE SCALISE and other

Members of Congress just a short time previously. But the minority leader did not fumble over words. He clearly named Justices Gorsuch and Kavanaugh in his threat, and when it caught the inevitable firestorm, his office deliberately tried to mislead the American people about what he said.

"[P]ay the price. You won't know what hit you"—those are not the types of statements we need from any elected official, let alone one of the highest ranking Democrats in the country, nor are they a good example because others—maybe vulnerable persons—who hear words like that may become incited to take things into their own hands in innumerable ways that we can't anticipate.

Unfortunately, some of our colleagues on the other side, including the junior Senator from Rhode Island, fell in line and chose to echo the minority leader in criticizing the Chief Justice.

It doesn't matter what case is before the Supreme Court or what ruling is ultimately handed down; congressional leaders must set an example for the American people and respect the independence of the judiciary and the three coequal branches of government. We have had innumerable discussions about hate speech and threats of violence against our leaders and politicians. The last thing we need is one of the most powerful men in the country making a threat against Supreme Court Justices. It doesn't matter whether you are a fourth grader on the playground or a U.S. Senator-our lesson should be that violence is never the answer and that words matter.

The simple end of this would be for Senator Schumer to apologize to the Justices for his attacks, by name: Justice Gorsuch, Justice Kavanaugh, and Chief Justice Roberts.

CORONAVIRUS

Mr. President, on another matter, at the beginning of February, the Air Force announced that my hometown, San Antonio, would be one of the quarantine sites for Americans evacuated from China due to the coronavirus. Lackland Air Force Base is home to an incredibly dedicated and talented group of airmen, and I thank the Air Force for their assistance in housing these American evacuates during their quarantine period. Also, the State of Texas and the city of San Antonio have many hard-working medical professionals, and I have no doubt that these patients who developed symptoms have received top-notch care while at Methodist Hospital and the Texas Center for Infectious Disease.

But there was and still is serious concern about the larger public health impact this virus could have. A couple of weeks ago, I brought together the city of San Antonio officials, like the mayor and two members of city council, for meetings with the Department of Health and Human Services and the Defense Department to discuss the ongoing mission concerns and challenges. The mayor and the city council had

some legitimate questions and concerns they needed answered.

I felt like, at the time, the meeting was a positive step to help encourage coordination between local officials and their Federal partners, but now there is even higher concern after we learned one patient was released only to later find out the test result indicated her virus was still active. At the end of her treatment, in accordance with CDC guidelines, the patient was tested on two occasions with a 24-hour intervening period, which was protocol at the time, and she was ultimately released. Following her release, though, a test that the CDC was unaware was conducted returned results indicating the patient was still a weak positive for the virus. At that point, she was returned to isolation, after spending about 12 hours in the broader San Antonio community, including time at a shopping mall and a hotel.

While I am glad this mistake was caught and corrected, it raises serious questions that need to be answered to ensure the continued protection of the American people.

Earlier this week, Senator CRUZ and I sent a letter to the Director of the Centers for Disease Control, Dr. Robert Redfield, asking him to explain how this incident happened and how it could be avoided in the future. Now that the majority of the individuals who had been evacuated from the Diamond Princess cruise ship, as well as from Wuhan Province—repatriated Americans—have been released from quarantine, what steps is the Centers for Disease Control taking to ensure they are truly clear of the virus? How are they monitoring those released from quarantine, and what public health risks does the larger population face after their release?

After a lot of conversations, we also asked Director Redfield if additional evacuees will be brought to Texas for quarantine and what will happen if San Antonio's health resources reach their maximum capacity.

I think it is fair to say that my hometown is carrying more than its fair share of this international outbreak, and its residents deserve answers. As we continue to see headlines about the spread of the virus in Washington State, New York, California, and others, it is clear that time is of the essence.

As we seek those answers, I encourage all of my constituents and all Americans to read the best guidance on how to keep themselves and their families safe. While this is a new virus, the same old techniques that your mother taught you while you were growing up apply: Wash your hands, disinfect commonly touched household surfaces, and avoid contact with those who are sick. That is just common sense. Try to avoid touching your face, be sure to cover your cough or sneeze, and stay home if you are not feeling well. Those are the commonsense ways we can protect ourselves.

I am incredibly grateful to the healthcare workers around the world who are battling this virus and the dedicated scientists who are working hard to develop a vaccine.

In the past few days, I have spoken with President Trump, Secretary Azar, and my colleagues on the Appropriations Committee—who did good work on this supplemental appropriations we just voted on—about the need for additional coordination and resources, and I thank each of them for their commitment in keeping Americans and Texans safe.

In this supplemental appropriations bill that we just voted on, I requested funding for State and local communities—including San Antonio—which have been at the forefront of this battle, and today we delivered a big win for them. The supplemental funding bill we just passed will make \$950 million available for reimbursement for the costs Texas and other States across the country have incurred while monitoring and treating individuals exposed to the coronavirus.

I want to thank Senator SHELBY and the ranking member, Senator LEAHY, for their work on this, and I am glad this much needed relief is now on the way.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. CASSIDY. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mr. Scott of Florida). Without objection, it is so ordered.

Mr. CASSIDY. Mr. President, one thing that is on everybody's mind right now is this: How do we prepare to address the coronavirus? I speak not just as a Senator but, perhaps even more particularly, as a physician who has done public health in my previous practice, working with immunizations, looking at all those issues as to who is vulnerable and who needs to be protected.

There are a couple of things that are quite apparent from what we have already learned from this epidemic. Let me compliment the Chinese. They have come in for some criticism that was well deserved, but in other things they have helped determine a lot of things that will benefit the rest of the world in terms of the natural history of coronavirus.

By the way, the theme of this talk is that we have to make sure that coronavirus medications are going to be available and affordable for senior citizens. Why do I emphasize senior citizens? One thing we have learned from the Chinese is that those who are 50 and above—and 65 and above, in particular—are the ones who are most likely to die from being exposed to and infected with coronavirus. That is our Medicare Part D population. If you

have a chronic illness—and chronic illness can be hypertension, high blood pressure—again, you are particularly susceptible. If we know that our Medicare population is most vulnerable, let us focus particularly upon them.

First, science is working. There are at least six vaccines that are being developed to attempt to address the coronavirus. Hopefully, one of them will work. There are other therapies being developed. Some of them are medications. Four different medicines are now being tested to see if they are the ones that absolutely prevent coronavirus. We know whatever drug that is could end up being quite expensive. For the Medicare Part D beneficiary, that leads into this discussion: How do we make sure those drugs are effective?

Let me show you the current situation. This is the Medicare Part D standard benefit parameter under current law. In the orange is that which the beneficiary pays, the Medicare Part D beneficiary. The blue is what the insurance plan pays. The green is what the manufacturer pays. The dark blue is what the taxpayer pays, the Medicare system.

What you see is, initially, beneath the deductible, the Part D beneficiary—the senior citizen on Medicare Part D—pays 100 percent. Then, you go into what is called the initial coverage phase, 25 percent; the coverage gap phase, 25 percent; and then above the catastrophic coverage, the senior citizen pays 5 percent, no matter how much that drug costs. That drug could

cost \$1 million, and they are going to

pay 5 percent under current law. By the way, that is the list price. Even if the manufacturer and the pharmacy benefit manager have a deal where the drug might be priced at \$100,000 but the rebate is \$50,000 that goes back to the manufacturer—so your net price is \$50,000—the beneficiary is paying 5 percent of the list price. She is paying 5 percent of \$100,000. She does not benefit from any rebates. This is current law.

We can imagine if a drug that is quickly developed, expensive to develop, and expensive to produce—and it is the only one that works against the coronavirus—it is going to be an expensive drug. We can also imagine if it is an old drug that happens to work, there might be somebody who buys it, closes down all the competition, and then charges an arm and a leg for this one old medicine—off patent for decades—that happens to be the one medicine that actually works to prevent the progression of coronavirus infection.

How do we protect the senior citizen? Right now, one more time, she is exposed to 5 percent of the cost, no matter how expensive it is, under current law. There are a couple of proposals out there right now. One of them is on the House side, called H.R. 3, and the other principal bill on the Senate side is called Grassley-Wyden. I am going to rename it in a second. But let me just say those are the two bills.

Mr. President, you know this, but for the folks watching, I will explain the tension. Whatever we do to control the cost of medication has to preserve the incentive for industry—for pharmaceutical companies and vaccine manufacturers—to continue to innovate. If you take away all their profits, they will just go home. Why invest billions of dollars if you don't make a profit? On the other hand, if they are able to charge so much that no one can afford it, no matter how innovative they are, it is as if the innovation never occurred.

If the theme of this discussion is "How do we make sure that coronavirus medications are available and affordable for the senior citizen?" we have to strike that balance. It has to be the balance between encouraging innovation by allowing a profit but not so much profit that the senior citizen cannot afford it, and it is as if the innovation never occurred.

So far there are two options. There is a bill on the House side called H.R. 3. A lot of what they have is very similar to that which was passed in the Senate, which I personally think is a very good bill. But they have one provision that says the Federal Government can dictate to the pharmaceutical company: This is how much you charge. And if you don't accept our price, ultimately, we will take 95 percent of your profits.

If we are going to try to incentivize companies to come up with new medications to fight cancer, to fight coronavirus, to fight Alzheimer's disease, we can't go to them at the get-go and say: If you don't accept the price we dictate, we are going to take 95 percent of your profit.

That is the way you end up with no innovation whatsoever. Even though there is a fair part of that bill that is constructed, that one is a deal breaker, and I can tell you that this doctor, who has seen a tremendous amount of innovation that has saved so many lives, will not agree to a provision that kills innovation.

But then we go to the other side. What about the bill that we have here in Senate Finance? It came out of the Senate Finance Committee on a bipartisan basis, and on that bipartisan basis, it saves taxpayers \$80 to \$100 billion over 10 years. Drug companies still make their profit. They still have the incentive to innovate, but taxpayers also save.

Most importantly, for the sake of this talk—which is how we make coronavirus medications affordable to the senior citizen when they become available—we cap the amount of money the senior citizen has to pay for her drugs. They no longer pay 5 percent of this price, even if the list price is \$1 million. We are going to cap that so the senior citizen can afford it. One thing we also do is protect the taxpayer from having to pay so much and, instead, ask the manufacturers and the pharmacy benefit managers to pay their fair share.

But for the purposes of this talk, instead of current law where it is 5 percent no matter how much it is, what the senior citizen has to pay is capped, so however much that coronavirus drug costs, the senior can afford it. She will not die because she can't afford to pay 5 percent of a list price no matter how high that list price is.

This so-called Grassley-Wyden bill has passed out of the Senate Finance Committee. It needs to come to the floor of the Senate. We need to have a vote on it because as we prepare to fight the coronavirus—to literally put in policies that will save lives of our senior citizens—one of those has to be this: How do we make sure the drug is affordable?

I am renaming Grassley-Wyden. I am now calling Grassley-Wyden the "Making Coronavirus Drugs Affordable." It caps out-of-pocket expenses; it lets patients pay over time, not all at once in January and February; it protects patients from price gouging; it preserves the innovation that does bring us these new drugs

We have lots of stuff coming through this Congress to address our Nation's vulnerability to coronavirus. We need to focus on those who are most vulnerable, those who are 65 and above. We applaud industry, pharmaceutical companies, researchers, and vaccine manufacturers for the effort they are putting in to find those drugs. We thank the Chinese for running many of these clinical trials that will hopefully establish that one of these drugs is actually effective. Yet what we must do is continue to allow innovation and, at the same time, make sure that coronavirus drugs are affordable. This bill will pass the Senate if it comes to the floor. I ask that it be brought to the floor.

I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Ms. MURKOWSKI. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

S. 2657

Ms. MURKOWSKI. Mr. President, I appreciate the strong vote that we had yesterday, 90 to 4, to advance and continue debate on S. 2657.

Just after that vote was concluded, I laid down a substitute amendment that contains the full text of the bipartisan American Energy Innovation Act. Having done that, we would normally begin the process of voting on amendments, whether by voice or by rollcall in this so-called regular order. We certainly have no shortage of options. We have some 200 amendments that have now been filed to the bill. What we are missing is a little bit of cooperation so that we can actually reach consent and move to votes.

We could not reach agreement to have votes throughout the course of

this week from Monday until, effectively, now. It has been frustrating. Both Senator Manchin and I have been working to try to facilitate that. We want to take amendments. The leader wants us to take amendments. We have a good bill. We think we have a pretty strong bill, but we know that it is always possible to make it better by gathering those ideas from colleagues who have not been part of the process on the Energy and Natural Resources Committee. We want to address those priorities from as many Members as we can.

While we were blocked on votes this week, our staffs have been working together—Senator Manchin's and mine—to develop a modified substitute that will add to the original text. We now have a total of 18 filed amendments that will be included as part of the underlying text. We have been working this week—maybe not actively out on the floor with a process where folks are voting—but we have been able to take some of these consensus areas, bring them together, and put them into a modified text.

This is not my preferred approach. If we could do it the good old-fashioned way, if you will, through individual votes or a managers' amendment—a managers' package—that is great. But a modified substitute was the only option that was available to us, recognizing that we have limited time on the floor, and we were still not able to form that path forward.

I want to speak quickly about what is very much a highlight. Our modified substitute includes an even number of priorities from both sides, some with amendments, some with modifications. We have been able to take provisions from the Senator from Arizona, the Senator from Rhode Island, Senator ERNST of Iowa, FEINSTEIN of California, TILLIS of North Carolina, from New Hampshire, South Dakota, Senator HASSAN, Senator SHAHEEN, Senator ENZI of Wyoming, DUCKWORTH of Illinois, CRAMER of North Dakota, CASEY of Pennsylvania, ROMNEY of Utah, Brown of Ohio. Wicker of Mississippi. STABENOW of Michigan, RISCH of Idaho, Senator Markey of Massachusetts-18 different provisions, which added to what we had done previously.

We have priorities from nearly 70 Members of the Senate. That makes a good, strong bipartisan bill even better and stronger

We now need to move to our final steps. Just a bit ago, the majority leader filed cloture on our modified substitute amendment, which will allow us to hold that vote on Monday evening. As we look to complete our work on this bipartisan innovation package, know that we are going to be doing that throughout today, tomorrow, and through the weekend.

I want to address very quickly now some of the support that the American Energy Innovation Act has received. We have focused on the priorities that it contains for Members here in the Senate, but we have also drawn strong support from many stakeholders outside. A group of 39 major trade associations, think tanks, advocacy groups, and environmental groups wrote us to express their strong support for our energy innovation package. The signatories include the U.S. Chamber of Commerce, the National Association of Manufacturers, the Environmental Defense Fund, and the Nature Conservancy—just to name a few of the many.

Here are some of the comments that we have heard.

They wrote:

Our diverse organizations recognize and agree that climate change is an important national priority that demands Congressional attention. While we may not agree on everything, we believe there is much common ground upon which all sides of the debate can come together to begin to address climate change, promote American technological leadership, and foster continued economic growth. In particular, there is a growing consensus that the development and commercialization of new technologies are important factors that will determine how quickly and at what cost greenhouse gas emissions can be reduced.

The American Energy Innovation Act will help do just that . . . [It] will accelerate these breakthroughs and enable adoption of lower emitting and more efficient technologies . . . Congress now has its best opportunity in more than a decade to enact significant energy legislation.

That is a pretty strong statement from those organizations.

The National Mining Association wrote to us, whose members understand as well as anyone that clean technologies rely on raw materials.

It wrote: "This forward-looking legislation takes steps to address the nation's alarming mineral import reliance and brings the United States to the forefront of research and development efforts in carbon capture technologies."

The Consumer Energy Alliance wrote that our American Energy Innovation Act "provides opportunities to make real progress on the energy issues and environmental protections that all Americans support."

The Bipartisan Policy Center wrote that our bill is "a landmark piece of legislation representing a down payment on the innovation necessary to decarbonize our energy sector and modernize our nation's energy policies."

The Business Council for Sustainable Energy wrote: "The bipartisan introduction of the American Energy Innovation Act demonstrates Congress' commitment to innovation in the U.S. energy sector."

All told, we have received support from more than 200 groups, companies, and organizations for this legislation. These are groups that are really involved in keeping the lights on in big cities, in small communities, and all across the Nation. These involve folks from Edison Electric Institute, the American Public Power Association, and the National Rural Electric Cooperative Association.

These are groups whose members are working to keep energy affordable, like the American Petroleum Institute and the National Ocean Industries Association. We appreciate all of them—ClearPath Action, Citizens for Responsible Energy Solutions, the Corps Network, the American Wind Energy Association, the Nuclear Energy Institute, the Clean Air Task Force, Third Way, the Energy Storage Association, and so many more that have contacted us and have shared their support.

We are hearing a lot from Alaskans as well. As the Alaska Power Association wrote in a letter we received this week:

APA and our member electric utilities throughout the State reiterate our support for the many energy law modernization elements that comprise your American Energy Innovation Act... AEIA will help Alaska's far-flung electricity providers and their consumers.

The U.S. Chamber of Commerce's Global Energy Institute wrote: "We urge the Senate to seize this opportunity to fuel American innovation and promote climate action by passing this legislation without delay."

Those are some pretty good words coming from them. We certainly would agree.

We had an opportunity this morning, in the Committee on Energy and Natural Resources, to hear from the head of the IEA, the International Energy Agency, which is based out of Paris, France. Dr. Fatih Birol heads up the member countries that are part of the IEA, and they track trends in energy markets. We do an annual update with Dr. Birol, and, as usual, his words were important, telling, and resounding.

As we reflect on what Dr. Birol high-lighted as areas of opportunity for the United States to be a global energy leader, what we have put in the American Energy Innovation Act is exactly the recipe that we should be pursuing to continue being a leader in the energy sector, to being a strong leader from an economic perspective, and to being a strong leader in energy security, in national security, and in environmental security.

We are doing the right thing, and we have it within this legislation. We will be moving forward more aggressively with it next week so that we can get to a good and positive conclusion for the Senate and for the country.

I yield the floor.

The PRESIDING OFFICER. The Senator from Georgia.

CORONAVIRUS

Mrs. LOEFFLER. Mr. President, I was sworn in 2 months ago and left behind a nearly three-decade business career to serve the people of Georgia in our Nation's Capital. It is truly my honor to support and defend the Constitution.

I arrived as impeachment began, one of the most divided and partisan times in the history of Congress. Now, with impeachment behind us and the President's having been acquitted, ongoing partisanship is undermining the American people's access to facts during a public health emergency.

What I have seen in the last few weeks has been alarming. Day after day, I witness exactly why the American people are fed up with Washington—the partisan rhetoric, the media's sensationalism, the negative political news—all while America is facing a public health emergency.

The government at all levels must carry out the responsibility to keep Americans safe. Federal agencies and the Vice President and our President are working relentlessly to do just that. We need to be united in our efforts to protect the health and safety of all Americans. This is not a time to score political points through baseless commentary. It is a time for facts.

I hope my colleagues, the media, and political leaders across America will continue to put Americans first and put politics aside while we prepare to combat this outbreak.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mrs. BLACKBURN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

TENNESSEE TORNADOES

Mrs. BLACKBURN. Mr. President, as I begin my remarks today, I express my thanks to my colleagues here in this Chamber and, certainly, all across Capitol Hill who have extended their thoughts and their prayers and have asked "How are you doing?" when it comes to talking about Tennessee and our citizens and those who have been so adversely impacted by the tornadoes this week.

The damage is absolutely indescribable. Even though, on early Tuesday morning, when the news broke and I started watching some of the local TV stations that had put drones up there around Nashville and Putnam County and over in Wilson County, I could not appreciate the extent of this damage until I walked these neighborhoods. That is something I did yesterday.

You can see the damage. Communities are now debris fields. It is just indescribable the power of this storm—an F-2, an F-3, and an F-4. These tornadoes ripped through Tennessee—through Carroll County, Gibson County, Humphreys County, Benton County, Davidson County, Wilson County, and Putnam County. The damage that they have seen on the ground is sometimes for 50 miles. It is just absolutely indescribable.

What we have seen are many families who have been left homeless. Their homes are now piles of rubble. We have seen over 100,000 Tennesseans initially without electricity, but because of the good work of the TVA, which is the power generator, and our local power distributors, we have that number worked down to 23,550. So that is beginning to improve, and the lights are, indeed, coming back on. Yet the damage

is still there and the loss of property. It is going to be in the hundreds of millions of dollars. Those estimates are beginning to take place, but there is a lot of work to do.

The loss of life is, indeed, the most tender as 24 individuals have lost their lives—18 in Putnam County. We have children who have lost their lives. We have dozens who have been injured and who have been hospitalized. We still have some individuals who are unaccounted for and are missing. So there is a long way back to normalcy as we look at this situation.

I will tell you that I give a lot of credit to our Governor and the leadership that he has shown as we have worked through this. He did get a formal request submitted to FEMA today. He has asked for President Trump to issue a major disaster declaration. This is going to include individual assistance for Davidson, Putnam, and Wilson Counties; public assistance for Benton, Carroll, Davidson, Gibson, Putnam, and Wilson Counties; and hazard mitigation statewide. He has also requested Small Business Administration loans for several counties.

This is catastrophic damage. As our teams worked together to assess the situation and as I worked yesterday with our State's insurance commissioner; with Director Sheehan of TEMA, the Tennessee Emergency Management Agency; with General Holmes, our Adjutant General for the National Guard; and FEMA, with its regional Director, one of the things that was so significant was that the debris field went on for miles and miles and miles outside of the areas that were hit. So we know this is going to take a little while.

I do have some information that I want to share. The Tennessee Emergency Management Agency has taken the lead in organizing the shelters and the command centers on the ground in order to get this information out to individuals in the State and to the individuals around the country who have family who live in these areas.

There are three contact points that I want to bring attention to: the home and property cleanup hotline, the statewide crisis phone line, and then, for individuals who are trying to figure out how to access help for recovery, the website TN.gov/TEMA. There is a resource directory—an aggregation—of where to go to find help and information.

The crisis phone line is a mental health phone line because the impact of this kind of tragedy just cannot be understated.

So, as I said, two important phone numbers—one can help you if you need emergency cleanup, and another will connect you to trained mental health professionals. Individuals should be encouraged to call if they have need there.

On the website, you will find shelter locations, emergency accommodations and transportation, and just some

practical information on that cleanup and then kind of next steps as you go about filing claims and rebuilding.

So we do look forward to individuals having access to this information and using it because we know that we want to be there and help them to recover during this terrible time.

Tennessee is a State that is known for its volunteer spirit, and as you look through some of the social media posts that were coming out during this storm and after the storm and you see the horror of what was transpiring with the tornadoes, you also see hope, and you see how the elected officials those local officials in these communities—have stepped up and have taken the lead. Our mayors and our sheriffs are to be commended for the work they are doing and also our emergency response personnel, all of our first responders, for the way they have shown up and they have worked through. Some of them worked through 36, 40 hours without a break in order to respond to this.

I was at the State Emergency Operations Center, and in Tennessee we have, at our National Guard facility, the TEMA response facility, and individuals would be so encouraged to see this working because you have representatives from the highway patrol and from the TBI and from the Red Cross and from so many different State agencies, and they are working there together to meet the needs of Tennesseans.

On Tuesday evening, when I landed, I went straight over to the operations center, and there was one gentleman, and he had his puppy there. So of course that was the first thing I wanted to do, was meet his pet. He was there working with him. And I found out that this employee, Brandon Ward, actually had slept on a cot there at the facility because he had lost his home. So what did he do? The storm hits. His home gets hit. He heads over to work. He has his pet with him. He was staying there, helping others even though he had experienced loss.

We were at a shelter, and there was a nurse, a paramedic, who was there, and I found out she was from Bowling Green, KY. I asked why she had chosen to come. She said: We knew you needed help. So she came from Bowling Green to fill in until someone could get there and handle a shift. Helping people. Meeting their needs.

We have seen Tennesseans by the thousands show up. Big smiles. They have got water. They have got food. They have brought along chainsaws and tractors and bulldozers and four wheelers—everything needed to clear these debris fields, to move into these communities where houses once stood, and to help these individuals who are seeking to push forward in rebuilding their lives, cleaning up the damage that has been left by this storm, sifting through what was once their home and finding those precious mementos. That is what is happening in Tennessee this week

We know this is going to be a long road back, but we also know we are getting special attention with FEMA being on the ground.

Tomorrow, we are going to welcome President Trump to the State, and he will be able to see firsthand what has happened by an unprecedented storm that swept through this State on the ground for 50 miles—an F-4 tornado—and he is also going to see Tennesseans working together.

I vield the floor.

The PRESIDING OFFICER. The Senator from Georgia.

DEFENSE APPROPRIATIONS

Mr. PERDUE. Mr. President, I rise today to talk about what turns into a perennial topic, and that is how we fund our military.

We are in a situation that in the last 45 years, we have only funded the Federal Government four times on time. Yet we see a situation where the world is more dangerous than at any time in my lifetime. We face five threats across five domains—this has increased over the last 15 or 20 years—and at the same time, we have been at work for 20 years against terrorism. That war has not abated. It has not gone away. It is still there.

We now face five threats—primarily, China, Russia, Iran, North Korea, and terrorism-across five domains: air, land, sea, cyber, and now space. Yet, with that backdrop, the world being more dangerous than at any time in my lifetime—and I remember the Cold War. I remember the Cuban missile crisis. These are things that, in my childhood, really imprinted on my brain how dangerous the world can be. Yet, today, I say with some qualification, the world is more dangerous than at any time in my lifetime. Yet, three times in the last 50 years—the last three Democratic Presidents cut spending in our military by 25 percent. That was in the late 1970s, in the mid-1990s, and just in the last decade. This is devastating. We saw that in readiness in January of 2017. Two-thirds of our F/A-18s couldn't fly. We had only 3 Army brigades ready to fight out of 59.

This was a devastating thing we did to the U.S. military, and it hasn't gone away today. Today—even today—under Republican leadership in this Senate, this is something that has been going on for decades; that is, we use something called continuing resolutions.

Let me describe where we are today. The reason I am here speaking to the body is that we are beginning the authorization process for defense and other authorizing functions within committees, leading to the appropriations process, which was supposed to be completed by September 30 this year, the end of our fiscal year. Well, we are in the sixth fiscal month of this fiscal year, which ends September 30, and we are just now beginning this process for a lot of reasons, impeachment being one. There are several other reasons contributing to the fact that we are late in this process. So we are staring down the barrel of another continuing resolution, which we now know costs the U.S. military \$5 billion per quarter.

For 12 of the last 13 years, the Congress has put a continuing resolution in place for the first quarter of each new fiscal year. Only in 2018, when this body stayed here in August and wrestled this issue to the ground, did we fund the military by the end of the fiscal year—only one time in the last 13 years. As a matter of fact, in 2018 when we got 75 percent of the budget funded, that was the first time in 22 years we had gotten that much funded.

This is ridiculous. It is broken. We have to fix it. The victim of that has been the U.S. military. This is devastating on their operation of rebuilding readiness and now on the recapitalization program we are beginning in earnest.

Over the last 20 years, shipbuilding has been devastated. We have lost some 20,000 vendors across all of the DOD, most of those in shipbuilding. Almost 14,000 primary vendors have been lost in the supply chain.

Now, even if we were to fund a recapitalization effort that would get us back to being on par with some of our peer competitors, I question whether we even have the supply chain today to do that. This is a major challenge for us right now.

Technology is building, our lethality is building, the way we fight our fleet is building, but we have to be serious about maintaining continuity of funding across decades with regard to this capability we have. We are the 800-pound gorilla beneath the sea today, but today we are outgunned and outsticked by one of our "near peer competitors," and that is China.

We have a 2016 shipbuilding plan that was done prior to the 2017 national defense strategy, the NDS. In the shipbuilding plan of 2016, it called for 355 ships by 2034. These are submarines, amphibious ships, heavy combatant ships, aircraft carriers—over the next 15 years.

Well, the NDS was done in 2017. We still don't know what that shipbuilding plan is to support the NDS. The new plan is on the desk of the Secretary of Defense. I understand he is taking his time to make sure he understands the requirements. He has a particular problem because of the budget. I get that.

But I want to highlight today what we are up against. Today, China has 355 ships in their navy; we have 296. That is a 54-ship disadvantage that we already have today in 2020. That is devastating. Most people in America don't think that. They don't know that.

Oh, by the way, they really have only one area of operations—the Indo-Pacific region, although that is changing. But we have multiple areas of operation around the world. So this is a huge disadvantage we already have today.

If you look at the next 15 years to 2034, they are projected to go to 435 ships; we are hoping to get to 355 under

the current plan of 2016. That may change when we see this new ship-building plan, which, by the way, was due when the budget was submitted to Congress. That is an 80-ship delta—80-ship disadvantage that we have to China. That doesn't count what Russia is investing in its new technology, submarine, and surface fleet.

We also know what China is doing with the Belt and Road Initiative on the back of this incremental capability they have in the naval power that they have been developing for the last 30 vears. That is the Belt and Road Initiative where they go into more than 30 ports in Africa, over 50 ports in Latin America—that is South America and Central America—where they make these proprietary loans. They have already foreclosed on two of those proprietary loans—one in Colombo, Sri Lanka, and the other in Karachi, Pakistan, where they have actually taken possession and they are now building military naval bases in those ports.

Add to that what we see them doing and have done in the South China Sea. I actually was blessed to be able to go with the Navy on a flyover—part of a Freedom of Navigation Operation in the South China Sea—to see exactly what China has done there. We saw Coast Guard ships 1,000 kilometers off the coast of China down in the South China Sea, patrolling the waters, as if they were within the 12-mile legal limit of China.

We believe that we can compete. Today we are still the 800-pound gorilla. Our technology and our sailors and pilots in the Navy and our marines are the best in the world. We can stand up to the threat today.

My question and caution today, as we are looking at this authorization for our defense and for the budgeting therein, we have to make sure that over the next 15 years that we do this shipbuilding plan, we maintain a more consistent and better funding for that plan so we can rebuild the supply chain in order to build this capability.

Let me state one other thing. The number of ships is a function of the distribution of those ships—how many small ships, large ships, carriers, submarines, and so forth. I get that. But the other is also a function of how the Navy will fight that. There are new doctrines being put in place. The Advanced Battle Management System is going in, and we are increasing dramatically the lethality of the weapons and the munitions on these vessels. That is the encouraging part. The discouraging part is that China has the lead right now with regard to range and speed and a few other things in terms of their munitions. I am confident we will catch up with that.

We have the first ever—thanks to President Trump, we have the first-ever audit of the DOD. It came to us 1 year ago. We have been looking at it. It identified \$4 billion of obsolete programs they wanted to get rid of. Between that \$4 billion and the \$5 billion

that is going to be wasted this year alone, if we end up with another CR in the October, November, December timeframe, that is \$9 billion. That is almost 40 percent of 1 year's shipbuilding plan. That is serious money, and it is up to us to get that taken care of and to find that money and to rebuild this Navy.

Let me close with this. The next 50 to 100 years will be determined in the next 3 to 5 years, in terms of our relationship not only with China but with Russia, Iran, North Korea, and the other threats we have around the world. We have to establish with our allies, particularly our NATO allies and also Japan—to make sure that they get their investments moving in the right direction so that, collectively, we can stand up to this growing threat around the world.

With that, I yield the floor. The PRESIDING OFFICER. The Senator from Oklahoma.

TALIBAN

Mr. LANKFORD. Mr. President, in the fall of 2001—it seems like forever ago—Trae Young, the great OU point guard and now Atlanta Hawks phenom, was just 3 years old. Darius Bazley, a player for the Thunder right now, one of the young guys, he was just barely 1 year old in the fall of 2001.

At that same time period now, almost 20 years ago, there was a man named Osama bin Laden working with a small group of people in a country called Afghanistan that most Americans could not even find on a map at the time. He was meeting privately with them to organize an attack on Americans that we could have never imagined. He was training individuals and sneaking individuals into the United States, training them further to be pilots and preparing them for an attack that happened September 11, 2001.

There is not a soul who was alive during that time period who doesn't remember where they were and what was happening on September 11, 2001. All of us, we were locked to our TVs watching an airplane fly into a side of a building and kill thousands of our friends and neighbors.

On September 14, the U.S. Congress passed an authorization for the use of military force for those individuals who carried out this attack, 3 days after that attack. By October 7, the first troops had landed in Afghanistan. They were organizing an effort to find Osama bin Laden and to eliminate the threat of them carrying that out again.

The very clear mandate at the time was to work with the government at that time in Afghanistan, the Taliban, who were a ruthless dictatorship. They had spread their hatred across Afghanistan, but they had also made a deal with al-Qaida to hide them inside of Afghanistan. And the Taliban, who willingly allowed Osama bin Laden and the terrorist group they knew was a terrorist group to remain there, became the spark for us to go to the Taliban and say: Either turn Osama bin Laden

over to the United States for trial and those who were with him in al-Qaida or we will come get them. And the Taliban's choice was to say: Come and get him, which we did.

Over the years, 775,000 American troops have deployed to Afghanistan at least once-775,000. There were 40 different nations that participated with us in Operation Enduring Freedom to remove the threat from that region of al-Qaida attacking us. Our twofold purpose was: Remove Osama bin Laden and al-Qaida's leadership organization and their ability to attack the United States and our allies, and No. 2, remove the Taliban from leadership in Afghanistan because they allowed al-Qaida to function and to operate in their country, and they would willingly do it again, so they could not be allowed to remain in Afghanistan as leaders. Those were our two agendas going into Afghanistan.

I am proud to say that the United States has won this war with Afghanistan. Al-Qaida has been decimated. We hunted down Osama bin Laden until, in 2011, we found him and took him and his core leadership out at his facility in Pakistan. We continue to drive al-Qaida into chaos and oblivion. We continue to hunt down the Taliban and their leadership, pushing them out of any semblance of leadership in Afghanistan and isolating them in every area we can. They have sanctions from all over the world against them, and their name has become synonymous with those who allow terrorism.

Since the time period that we moved in and we won this war, four Presidential elections have happened in Afghanistan. As they have seen the peaceful transition of power, as messy as it is in many other parts of the world-including us-they have seen four elections happen there. Previously, under the Taliban's ruthless thumb, women could not work or attend school. Now, 36 percent of the country's workforce is female, 40 percent of elementary students are female, and 33 percent of university students are female. There has been a tremendous transition in what is happening in Afghanistan.

They are still a Third World country and still struggling in many areas. We have seen Afghanistan begin to start to get some traction there. Their military training has partnered with American leadership—generals all the way down to the infantry level—to meet with Americans and learn how to have a professional fighting force there.

Now, are there issues that still remain in Afghanistan? Absolutely. Afghanistan has a long history of being a tribal region, with tribal leaders in multiple areas, and a difficulty in uniting a very large country. But after four Presidential elections and through multiple areas of peaceful growth, it is time to bring this war to an end.

To answer the question: Why did we go to Afghanistan in the first place and has that been accomplished, the answer

is, we went to remove the Taliban from the leadership there so they would not allow al-Qaida to thrive. Al-Qaida is decimated; Osama bin Laden is dead; and the Taliban have been removed from power.

Now, is everything perfect in Afghanistan? Far from it. The goal was not peace and daisies when we left. The goal was to accomplish what we chose to accomplish, to establish a functioning government so they would not have to go back to the Taliban, and then to leave.

The President's team has been negotiating an agreement with the leadership of the Taliban and with the leadership of Afghanistan to determine: Can we begin the process of a peaceful transition out? That conversation has gone on for 2 years. Obviously, the Afghan leadership likes our forces to be there. It is a stabilizing force for their country, but we have no intention to remain in Afghanistan forever. Our intention is to accomplish what we need to accomplish and then to withdraw.

Now, I think it entirely likely that we will have a long-term agreement with Afghanistan and to have troops remain in the region, much like we do in Honduras right now. We are not fighting a war in Honduras, but we do have a base in Honduras so when there are disasters in that area or in order to fight drug trafficking that comes through that area, we have a base of operations.

I am one of those who believes long term we should have a base of operations in Afghanistan. It would be wise to do that. What is called ISIS-K or ISIS in the Khorasan—they are thriving in that region, and it would be wise for us to keep our eyes on other terrorist organizations that may try to rise.

We have no intention to stay long term and forever or to control, manage, or be the security forces for the Afghan Government. We are the United States of America. We have issues we want to take care of at home, and we want our sons and daughters to live life with their sons and daughters.

Now, in the last 48 hours, since this peace treaty, this organization, this reduction of hostilities—whatever you want to call it—since this has kicked into place in the last 40 hours, we found out just how fragile things are. The Taliban reached out and conducted several attacks at some security checkpoints in Helmand—not against our forces but against some Afghan forces.

They actually reached out just yesterday and brought a defensive attack against the Taliban in that region. It is the first violence we have had in 11 days. We fully expect there will be moments like that, and there is no expectation that everything is going to be perfect when we leave Afghanistan.

Quite frankly, the United States does not operate in every location and expects there to be peace and harmony in every location across the world. That is not our standard. Right now, in Venezuela, that government is in great chaos, but we don't have troops on the ground trying to manage that situation. We are diplomatically working to engage and bring a peaceful resolution to what is happening in Venezuela. We are putting aggressive economic sanctions in that place to do what we can to help.

We will continue to stay engaged with Afghanistan. We have many friends there. We have people whom we worked with for a very long time, side by side. We will stay engaged with Afghanistan, but it is not our intent to stay and remain forever. Our sons and daughters need the ability to come home and live their lives.

There are folks like Terry Hill— Terry Hill, from Kellyville, OK. He enlisted in the Army in 2003, right in the heat of the war with Afghanistan. He served as an engineer and then later became an officer and a pilot of a helicopter. He flew 750 combat missions in Afghanistan—750. After 13 years of serving in the Army and after some very hard landings, including one final hard landing for him, Terry came back home. He is back home in Oklahoma. where he runs the Rapid Application Group. It is a 3D printing company. It is a really remarkable place. It started at his house and has now grown into a thriving company, and that 3D printing company does some really remarkable work for a lot of great customers. He hires a lot of veterans. He loves to hire other veterans, in fact, and knows the unique needs and issues there.

Every Friday, Terry and a whole bunch of others across the area and all the folks there all will wear shirts—what they call RAGFriday. It is to recognize and bring awareness to veteran suicide because he has way too many friends he wishes he had back.

Terry is one of the 775,000 people who served in Afghanistan from the United States. We are glad to have Terry home. We are proud of his company and what he is doing and the leadership they have. We are proud of his continued engagement in the veterans community, continuing to make a difference

We want all of these folks to be able to come home and to be our neighbors again and for us to hang out with them. So in the days ahead, I look forward to a peaceful resolution and, after winning this war in Afghanistan, to be able to come home, to have continued diplomatic engagement with them, with a small military footprint, just to be able to help them in the region when needed.

I am grateful that we are directing our Nation and directing our military toward home. I could not be more grateful for folks like Terry and the 775,000 others who have done everything their country has asked them to do—to push back on al-Qaida and their ruthless attacks on the United States and to make sure that that does not happen again. I am proud of them for what they did.

Our family lives in safety and freedom, and millions of Americans live in gratitude because of those 775,000 folks who went there to keep the war from coming here again.

With that, I yield the floor.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The senior assistant legislative clerk proceeded to call the roll.

Mr. McCONNELL. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

MORNING BUSINESS

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Senate be in a period of morning business, with Senators permitted to speak therein for up to 10 minutes each.

The PRESIDING OFFICER. Without objection, it is so ordered.

REMEMBERING BOBBY MILLER

Mr. LEAHY. Mr. President, Vermont has lost one of the finest people we have had in our State. Bobby Miller epitomized the very best of Vermont ideals, from his childhood straight through all that he accomplished in our State. Throughout it all, he and his lovely wife Holly were a constant, quiet source of giving. The Millers have always prioritized Vermont communities, never losing sight of their humble upbringings and never expecting praise for their philanthropy, even when they most deserved it. I know Marcelle and I join with all Vermonters in mourning the passing of Bobby Miller. Our hearts go out to Holly and their family.

I ask unanimous consent that the article, "Developer and Philanthropist Robert 'Bobby' Miller Dies at 84," originally published by "Seven Days," be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From Seven Days, Feb. 5, 2020] DEVELOPER AND PHILANTHROPIST ROBERT 'BOBBY' MILLER DIES AT 84

Vermont lost one of its most generous and colorful—philanthropists on Tuesday, February 4, when developer Robert "Bobby" Miller died of a heart attack, at the age of 84

A self-made man who grew up dirt poor in Rutland, Miller gave away millions to Vermont nonprofits in cash donations and in-kind work through his company, REM Development. He and his wife, Holly, who survives him, contributed to the King Street Center, Champlain College, the Visiting Nurse Association, the VNA Respite House, Flynn Center for the Performing Arts and many other local organizations. Their 2013 contribution to the University of Vermont Medical Center was valued at \$13 million.

Miller invented himself. With just a high school education, and a winning combination of charm and audacity, he worked his way up through the building industry in Vermont. Despite losing an arm at birth, he became an

auto mechanic, then convinced a Burlington engineering firm to hire him as a draftsman. After learning on the job, he started New England Air Systems in 1972. Twelve years later, he sold the business to his employees. "It gets companies spread out to people who would never own them," he told me when I profiled the Millers 20 years ago in Seven Days. He started REM Development in 1984. Although it is based in Chittenden County, the company also built, bought and rehabbed properties in downtown Newport and Rutland.

Despite his financial success, Miller was not a typical businessman. He preferred verbal agreements to written ones and engaged in all manner of creative financing to spark economic development. He happily rented office space to Seven Days when the paper started in 1995—a windowless room in the basement of his building, Miller's Landmark, at the top of Burlington's Church Street. He suggested we pay \$300 a month for the first year and, if Seven Days were still in business at the end of it, we could pay him the difference between that sum and the real rent—aka a balloon payment.

(At the request of Mr. McConnell, the following statement was ordered to be printed in the RECORD.)

BUDGET ENFORCEMENT LEVELS FOR FISCAL YEAR 2020

• Mr. ENZI. Mr. President, section 251 of the Balanced Budget and Emergency Deficit Control Act of 1985, BBEDCA, establishes statutory limits on discretionary spending and allows for various adjustments to those limits. In addition, sections 302 and 314(a) of the Congressional Budget Act of 1974 allow the chairman of the Budget Committee to establish and make revisions to allocations, aggregates, and levels consistent with those adjustments.

The Senate will soon consider H.R. 6074, the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020. This measure provides supplemental appropriations to support activities related to public health and response to the coronavirus that qualify for cap adjustments under current statute.

This measure includes \$7,767 million in budget authority that is designated as being for emergency purposes pursuant to section 251(b)(2)(A)(i) of BBEDCA. The entirety of this budget authority falls within the revised non-security category. The Congressional Budget Office estimates that these appropriations will result in \$1,041 million in outlays in fiscal year 2020.

As a result of the emergency designations, I am revising the budget authority and outlay allocations to the Committee on Appropriations by increasing revised nonsecurity budget authority by \$7,767 million and outlays by \$1,041 million in fiscal year 2020. Further, I am increasing the budgetary aggregate for fiscal year 2020 by equivalent amounts.

I ask unanimous consent that the accompanying tables, which provide details about the adjustment, be printed in the RECORD.●

There being no objection, the material was ordered to be printed in the RECORD, as follows:

REVISION TO BUDGETARY AGGREGATES

(Pursuant to Sections 311 and 314(a) of the Congressional Budget Act of

\$s in millions	2020
Current Spending Aggregates: Budget Authority Outlays	3,816,965 3,733,409
Adjustments: Budget Authority	7,767

REVISION TO BUDGETARY AGGREGATES—Continued (Pursuant to Sections 311 and 314(a) of the Congressional Budget Act of

\$s in millions	2020
Outlays	1,041
Revised Spending Aggregates: Budget Authority	3.824.732
Outlays	3,734,450

REVISION TO SPENDING ALLOCATION TO THE COMMITTEE ON APPROPRIATIONS FOR FISCAL YEAR 2020

(Pursuant to Sections 302 and 314(a) of the Congressional Budget Act of 1974)

\$s in millions							2020	
Current Allocation: Revised Security Discretionary Budget Authority							746,000 654,981 1,416,510	
Revised Security Discretionary Budget Authority Revised Monsecurity Category Discretionary Budget Authority General Purpose Outlays Revised Allocation:							7,767 1,041 746,000	
Revised Security Discretionary Budget Authority Revised Nonsecurity Category Discretionary Budget Authority General Purpose Outlays							662,748 1,417,551	
Memorandum: Detail of Adjustments Made Above	000	Program Integrity	Disaster Relief	Emergency	Wildfire Suppression	U.S. Census	Total	
Revised Security Discretionary Budget Authority Revised Nonsecurity Category Discretionary Budget Authority	0	0	0	7,767	0	0	7,767	

VOTE EXPLANATION

Mr. MARKEY. Mr. President, I was necessarily absent, but had I been present, I would have voted yes on roll-call vote No. 65, the Motion to Table S. Amdt. 1506 to H.R. 6074, making emergency supplemental appropriations.

CLIMATE LEGISLATION

Ms. KLOBUCHAR. Mr. President, I rise today to address several proposals with significant consequences for our environment that have come before the Senate this Congress. In particular, I would like to express my support for the joint resolution of disapproval concerning the Environmental Protection Agency's regulations to reverse the Obama administration's Clean Power Plan rules and my opposition to two amendments to weaken existing protections for public lands.

I am dedicated to promoting policies that address the urgent climate crisis. We cannot wait 50 or 100 years to address the climate impacts that threaten the livelihoods of our farmers, our businesses, our infrastructure, and our national security. It is for that reason that I oppose the administration's efforts to overturn, roll back, and weaken the Clean Power Plan rules, and I cosponsored S.J. Res. 53, a joint resolution providing for the disapproval of the regulations submitted by the Environmental Protection Agency to repeal Obama administration's Clean Power Plan rules. In order to fully address our urgent climate crisis, the Clean Power Plan rules must be reinstated and strengthened.

It is also our responsibility to preserve our natural resources and pass them on to future generations through responsible conservation and smart policies that allow outdoor recreation to thrive. This Congress, the Senate has considered proposals—which I oppose—to reduce, diminish, or eliminate protections for existing national monuments and to prevent the use of funds

from the Land and Water Conservation Fund for land acquisition. These proposals would weaken the core mission of two critical conservation programs that preserve our natural resources.

I have voted against similar proposals that would undermine the Antiquities Act or the Land and Water Conservation Fund when they have been considered as amendments to comprehensive public lands bills because I believe that we need to do more to protect and conserve our public lands. I have also cosponsored Senator UDALL's legislation to reinforce existing law on the establishment of national monuments and Senator MANCHIN's bill to provide full, permanent funding for the Land and Water Conservation Fund.

TUSKEGEE AIRMEN DAY

Mr. JONES. Mr. President, I rise today in recognition of the inaugural Tuskegee Airmen Day to be held annually on March 7 in the State of Alabama, marking the anniversary of the first graduating class of Tuskegee Airmen in Tuskegee, AL. After decades of being barred from flying for the U.S. military, on March 19, 1941, the U.S. Department of War created the all African-American 99th Pursuit Squadron in Tuskegee, AL. Upon completing 1,600 missions, destroying over 250 aircraft, and laying the foundation for President Harry S. Truman to desegregate the U.S. military in 1948, this courageous, boundary-breaking group of 13 African-American men would go on to be known simply as the Tuskegee Airmen.

Recently, the President signed H.R. 2500, the National Defense Authorization Act for Fiscal Year 2020, which approves the honorary promotion of Documented Original Tuskegee Airman, U.S. Air Force Colonel (retired) Charles E. McGee, to brigadier general. I believe it is a well-deserved promotion for a hero the likes of General McGee. It is my honor to commend and

recognize General McGee, who is one of the last surviving members of the Tuskegee Airmen.

Less than a year after the Japanese attack on Pearl Harbor, General McGee enlisted in the Army Air Forces on October 26, 1942. He went on to become one of the first pilots to graduate from the experimental Tuskegee Institute in June 1943. General McGee also has the distinction of flying more combat missions in World War II, Korea, and Vietnam than any other Air Force pilot. Brigadier General Charles McGee will be in attendance at the inaugural Tuskegee Airmen Day ceremony in Alabama this year.

For over half century, the courage, tenacity, and grit of General McGee and all of his fellow Tuskegee Airmen have been a source of hope and inspiration for generations of Americans. I congratulate the city of Tuskegee and the State of Alabama for recognizing such a distinguished group of servicemembers who helped change the course of our Nation's history.

GAME CHANGERS STUDY

Mr. PAUL. Mr. President, I recently had the honor of being welcomed by Game Changers, an organization based in Louisville, KY, devoted to guiding our youth toward productive and meaningful lives, for a panel discussion on the impact of violence in our community. The executive director of Game Changers is Christopher 2X, whom I have known for many years and watched change the lives of so many Kentuckians through his advocacy, leadership, and community building efforts. In December of 2019, just a few months ago, Christopher showed me the findings of Game Changers's study on the impact of youth violence recently released by his organization. Subsequently, I asked him to organize

an event in West Louisville with a panel of community leaders and parents to discuss the report and how violent crime affects the lives of Louisville youth.

At the event, we not only discussed the findings but also heard from Louisvillians whose real-life stories are contained in the pages of those reports. Earnestine "Tina" Tyus described how the ongoing physical and the mental suffering of her grandson, Ki'Anthony Tyus resulted after being shot. Rather than excelling at football and basketball, Ki'Anthony was focused on learning how to walk again. Violence also has indirect consequences. Stevente Wood started failing out of school, treating those around him poorly, and had trouble sleeping at night. This downward spiral was a result of witnessing the murders of his mother and older brother. Jarron Jones, a behavioral therapist, recounts a story of how a once-promising baseball career for one student may now never come to fruition because he is too afraid of violence to continue playing the sport. Only personal stories such as these truly demonstrate the extreme toll taken on children exposed to violence.

That is why I feel compelled to share Game Changers's findings on violence and its impact on our youth with my colleagues. Tragically, children are exposed to violence in every corner of our Nation. I ask unanimous consent that this report be printed in the CONGRESSIONAL RECORD with the hope that every Member of Congress will read it and work with me to create safer communities for our children.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

VIOLENCE IMPACT ON CHILDREN LEARNING The Christopher 2X Game Changers Target Education—Crush Violence

KI'ANTHONY TYUS AND HIS GRANDMOTHER ERNESTINE "TINA" TYUS

Tina Tyus has a comfortable home in West Louisville where photos of grandchildren she has raised are on display or within easy reach

There's Ki'Anthony as an infant along with one of the last pictures of him, at the family's Thanksgiving gathering last year, a lanky teenager smiling next to a proud grandmother who "had him since he came into this world."

Their world, from the time Ki'Anthony was 9, has been devastated by gun violence.

At age 9, Ki'Anthony was shot by a stray bullet while playing basketball in a park and suffered a debilitating leg injury. Four years later, on Dec. 22, 2018, he died when the stolen Lexus SUV he was riding in crashed into a utility pole on Fern Valley Road after a police chase. Four other juveniles in the car including the driver survived.

His family is grabbling with the circumstances of his death and does not understand how or why he ended up in the stolen

Known as "Lil King," playful and fun to be around, Ki'Anthony was a symbol of resilience in a media spotlight during anti-violence efforts after he was shot. He was an active participant in a Christopher 2X "Hood2Hood" antiviolence movement. He visited other gunshot victims in the hospital to offer encouragement and comfort.

He also struggled with his wounds, both emotional and physical, and navigated among peers who were not always good influences

His gun shot injury put him in the hospital for several days. He had multiple surgeries in the aftermath followed by months of physical therapy. He had a rod in his leg for a year and a bullet was left there permanently because of the damage it could cause if it was removed.

The boy who loved to play football and basketball "wasn't able to play any sport and that devastated him. He had to basically start all over again walking," his grandmother said. He was "angry, very angry."

He began disobeying rules in her home, and feared getting shot again, she said. His grades suffered, and she said a contributing factor was his assignment to a middle school far away from home that required a long commute on two buses each morning and afternoon while he was using a walker because of his leg injury. He acted out, she said, so he could be sent to another school.

His two sisters—11 and 16—also have been impacted. Neither are doing well in school, and "they are just hurt." she said.

A happy time was last Thanksgiving, a few weeks before Ki'Anthony died, and she had made his favorite foods including a strawberry cake for the large annual family gathering in her home. "He was jumping around here, dancing."

At Thanksgiving, she told Ki'Anthony she would buy him a purple suit for Easter like the ones he saw and admired at a gospel program they had attended, "not knowing I had to bury him before Easter. He died on my mother's birthday. It just eats me up."

385—Number of people shot in Louisville in 2017, an average of 32 people each month.

355—Number of people shot in Louisville in 2018, an average of nearly 30 people each month.

276—Number of people shot in Louisville in the first nine months of 2019, an average of more than 30 people a month.

JAMIE DENTON WITH HER SON ROBERT LEACHMAN

Jamie Denton chokes up talking about the impact her son's violent death has had on his three younger brothers and how she's struggled.

Robert Leachman, 20, died on Aug. 2, 2017, from multiple gunshot wounds at Parkway Place Apartments two weeks before he was to start nursing school. The family believes the shooting stemmed from an earlier argument on a basketball court.

Jamie's three other sons, who were 9, 11 and 16 at the time, were close to their brother and their behaviors all changed in different ways after his death.

"It took something out of them," she said. Before the death of their brother, they were good students with good grades, she said. Afterward, her 16-year-old "shut himself off and didn't go out, was scared to take TARC and had to have a ride with someone to go anywhere. He no longer wanted to attend Ballard and instead now attends Jefferson County High School.

The 11-year-old became out of control in school, not listening, but now is doing better, she said. The 9-year-old withdrew but also began writing rap songs about his brother and at the end of the school year he chose the topic "Stop the Violence" for a project.

She and her children have all had counseling and their public schools have been helpful but her children "are hurt and stressed and looking at me, they see more stress because they are worrying about me," she said.

They moved after the shooting, she said, and now feel safe in their neighborhood but

not safe enough to visit a nearby park. Her older son warned her to stop walking in the park because of a gang that frequents there. "So, I don't go to that park," she said.

A few weeks after her son was killed, when she was still in her old home on Madison Street north of Broadway, during a neighborhood cookout on Labor Day weekend, shooters fired bullets at homes including hers and shot up cars. "We were terrified," she said.

"I switched up my house and I switched up my car. I had to, to survive."

In the aftermath of her son's death, her health declined, and she suffered a heart attack at age 39 last spring.

"Kids will keep you strong because they know what you're going through. They want to see you the same."

Murders from gun fire are a "totally different" level of dying than by other means. "It's the cruelest thing, that a person can die of that."

1,016—Number of times in the first six months of 2019 that an electronic gunfire detection system alerted police to shots fired in an area totaling six square miles, an average of nine times a day, 269 times a month.

The system called Shotspotter operates in parts of the 1st, 2nd and 4th police districts in West Louisville, and Smoketown and Old Louisville just east and south of downtown.

STEVONTE WOOD

Stevonte Wood, 23, earned a college degree in three years, has a fulltime job as a security officer, and is recently married—a happy, fulfilling life that was highly unlikely 10 years ago.

Stevonte was 13 when he witnessed a horrendous act of violence, the shooting deaths of his mother and older brother after an argument on a basketball court at his family's Shively apartment complex. After that terrible day, for Stevonte, "things really took a turn."

He was on a grieving, trauma-filled downward spiral marked by anger, bad conduct and failing grades. Family support, counseling, caring teachers, others in his life—and his own hard work and determination—helped Stevonte rebound.

Before the shootings, he had been a good student, making A's and Bs, which he credited in part to his mother who "made me book heavy." His father worked long days, taking two buses to and from their home to his construction job.

After the shootings, Stevente was deeply troubled and struggling. He was still living in the apartment where his mother and brother were killed, and he had trouble focusing and sleeping. When he did sleep he often had nightmares. He argued with his father, who had been injured in the shootings and was grieving. (They now have a close relationship).

Angry and withdrawn, he failed 9th grade. He went to school but had trouble concentrating. "I was there but I wasn't there. I was constantly thinking about what happened." He wanted to communicate but he said he didn't know how; his words were angry, and he said he felt "a lot of self-hatred." He worried about his father's safety and that someone might retaliate against his family in another act of violence.

From Butler High School he was sent to Western High School to repeat 9th grade, which turned out to be blessing, he said.

Counseling helped him manage his grief, overcome his anger and detachment so he could focus on schoolwork, he said, and teachers encouraged him while holding him responsible. A turning point came when one told him he didn't want to fail the same grade twice, that would "not be good, trust me."

"I started listening in class, participating and my grades climbed up."

He was motivated to make up for failing at Butler. "The people I was surrounded by were well-rounded people. Once I put myself around people who wanted me to succeed, that was one heck of an opportunity. I didn't want to miss out on it."

With good grades, he pursued advanced placement classes in his junior year at Western and started racking up college credits through courses taught through Jefferson Community Technical College. When Stevonte received his high school diploma in 2015 he had 31 college credits toward his degree from the University of Louisville, which he earned in 2018.

His decision to major in criminal justice was influenced by the good relations he had with police officers after his mother and brother were murdered. "I began to idolize the good police and those who interact with the community," he said. Police were kind to his family and checked on them, he said, and he thought he could be like them and help people.

He has shared his story with other survivors of gun violence to offer hope and encourages awareness of the signs of trauma in children

Anger, withdrawal, depression are key signs, he said. Schools and parents also need to be connected. "When you get that disconnect, that's when you start losing kids. We need to find who these kids are and take the time to understand their situation and help them to the best of our abilities."

4,558—Number of times citizens reported hearing gunfire to Louisville Metro Police in 18 months, from Jan., 2018–June, 2019, over 200 times a month.

JERRON JONES—LICENSED PROFESSIONAL COUNSELOR ASSOCIATE

As a behavioral therapist, Jerron Jones spends much of his time trying to help families and children suffering from trauma resulting from exposure to violence.

The symptoms of trauma in children vary based on age and the individual child but a "huge sign" is an inability to develop a relationship with an adult and show respect for the teacher, Jones said. Children in those situations, he said, often lack a consistent, nurturing adult in their lives.

A lot of kids lack confidence and self-esteem and don't hear encouraging words or praise for what they do well and the strengths they have, he said, and "that leaves them without a skill set to build on."

Jones advises adults in their lives to celebrate them with compliments and praise for their efforts. Children should also be comforted by adults who remain calm and patient even though the circumstances can be difficult, he said. Listening to them and showing an interest in what they like to do, he said, as well as working with them and sharing new ideas can help them build self-esteem.

Parents and teachers should be aware of signs of trauma, and seek help when needed, he said, but often parents don't feel comfortable revealing upsetting circumstances that may be a root cause of a child's trauma. Building trust and showing integrity, he said, goes a long way in addressing a traumatized child's needs.

"Early exposure to extremely fearful events affects the developing brain, particularly in those areas involved in emotions and learning. . . For young children who perceive the world as a threatening place, a wide range of conditions can trigger anxious behaviors that then impair their ability to learn and to interact socially with others." Source: National Scientific Council on the Developing Child (2010). Persistent Fear and Anxiety Can Affect Young Children's Learning and Development: Working Paper No. 9.

Jones cites the following age-related symptoms children may have in response to a traumatic event or series of events including exposure to gun violence:

Five and under: May be irritable, fussy or difficult to get calmed down. They may be easily started or show behaviors common in younger children such as thumb sucking. Clingy behavior and frequent tantrums may also be present, and they may talk or act out a traumatic event.

Ages 6-12 may have trouble paying attention or be withdrawn. Their performance may decline in school. They may be in trouble at school or home, fearful, sad or want to be left alone.

Teenagers may refuse to follow rules, talk back more often, talk about the event or deny it happened, withdraw, engage in risky behaviors, change sleeping or eating patterns, have nightmares and may turn to drugs or alcohol

Professional help should be considered, he said, if symptoms persist, get worse or the child's symptom are extreme and unresponsive to attempts to help.

NYREE CLAYTON-TAYLOR—2019 KENTUCKY ELEMENTARY SCHOOL TEACHER OF THE YEAR

Teaching predominately African American students in West Louisville, NyRee Clayton-Taylor recognized symptoms of suffering—anger and lashing out, or withdrawal and not doing the work. Kids would tell her about an uncle who was shot, a father lost to gun violence, parents in prison. Some couldn't find words to express themselves.

So, Clayton-Taylor, a resource teacher at Wheatley Elementary School, created a curriculum around their joys in life, their interests, their culture. Her energy, creativity and impact earned her recognition as the 2919 Kentucky Elementary School Teacher of the Year.

"Academics will not happen if a student is not healed," she said. "I decided to infuse academics with healing so they could get it at one time."

Her solution was to use hip hop, the popular music genre especially among African American youth, as a primary teaching tool, along with rap, graffiti artwork, and books about African American history and culture to help children focus, write, create, work in teams, and solve problems, all beneficial lifelong skills.

"I had to bring in hip hop. It was a must so that they could have a narrative that was their own," said Clayton-Taylor, now in her 20th year of teaching.

In a nationally represented survey, 8.2 percent of all children, from age 2–17, were reported to have witnessed gun violence or heard gunshots in their communities. Youth ages 14–17 had the highest exposure at nearly 17 percent. Source: Finkelhor D, Turner HA, Shattuck A, Hamby SL. Prevalence of Childhood Exposure to Violence, Crime, and Abuse: Results from the National Survey of Children's Exposure to Violence. JAMA Pediatr. 2015;169(8):746–754. doi:10.1001/jamapediatrics.2015.06 76.

REMEMBERING LAWRENCE HAMMOND

Ms. SINEMA. Mr. President, today I wish to honor the life and legacy of Lawrence "Larry" Hammond, a tireless advocate for justice who passed away in Phoenix, AZ, on March 2, 2020. Larry was a respected attorney and the senior partner of the investigation and criminal defense group at Osborn Maledon in Phoenix. Throughout his career, he worked to defend the wrongly accused and marginalized.

Larry founded the Arizona Justice Project in 1998 while he was a member of Arizona Attorneys for Criminal Justice. The organization focuses on representing indigent Arizona inmates whose claims of innocence or manifest injustice have gone unheeded. Under Larry's leadership, AJP has received over 6,000 requests for assistance and currently handles 40 to 50 cases in post-conviction proceedings.

Larry's legal career was legendary. After earning his juris doctor at the University of Texas, he served as clerk to Judge Carl E. McGowan of the U.S. Court of Appeals for the DC Circuit, as well as Supreme Court Justices Hugo Black and Lewis Powell, Jr. In the 1970s, he represented the NAACP in their effort to desegregate Tucson schools. He was also a special prosecutor during Watergate and helped negotiate the release of American hostages in Iran while he served as a first deputy attorney general in the Office of Legal Counsel.

Not surprisingly, Larry received many prestigious awards throughout his career, including the Department of Justice's Exceptional Service Award in 1980 and the American Inns of Court in 2013. He was inducted into the American College of Trial Lawyers in 2013.

I had the honor of meeting Larry when I was a law student at Arizona Student University and worked with the Arizona Justice Project. Larry was a generous mentor, a studious researcher, and a fierce defender of the Constitution. I will miss him dearly.

Larry is survived by his wife Frances, their children, Brooke, Blake, and Amanda, and nine grandchildren. He will be missed by other family members, friends, and the entire Arizona legal community. Please join me in honoring his memory.

ADDITIONAL STATEMENTS

TRIBUTE TO JERRY RONNING

• Mr. DAINES. Mr. President, this week I have the honor of recognizing Jerry Ronning, of Ronning Auto, Truck and Tractor in Carbon County for winning business of the year at the Red Lodge Chamber of Commerce Awards.

Jerry was nominated for the award because of his commitment to the community and the excellent services he provides for locals and tourists in the Red Lodge area.

Red Lodge Assistant Police Chief Scott Cope nominated Jerry saying, "Whatever the time of day or the time of year they go all out to help the community. They routinely drop everything to help trapped motorists on the Beartooth Pass. They embody the definition of small town, hometown pride."

Assistant Police Chief Cope's words describe exactly why the folks of Red Lodge are proud of Jerry and Ronning Auto, Truck and Tractor.

It is my honor to recognize Jerry for earning the Business of the Year Award, and I, along with all of the folks of Red Lodge, are grateful for the services Ronning Auto, Truck and Tractor provide for the community.

MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Ms. Roberts, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages from the President of the United States submitting sundry nominations and a withdrawal which were referred to the appropriate committees.

(The messages received today are printed at the end of the Senate proceedings.)

PRESIDENTIAL MESSAGE

REPORT RELATIVE TO THE CONTINUATION OF THE NATIONAL EMERGENCY THAT WAS DECLARED IN EXECUTIVE ORDER 13692 OF MARCH 8, 2015, WITH RESPECT TO THE SITUATION IN VENEZUELA—PM 50

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, together with an accompanying report; which was referred to the Committee on Banking, Housing, and Urban Affairs:

To the Congress of the United States:

Section 202(d) of the National Emergencies Act (50 U.S.C. 1622(d)) provides for the automatic termination of a national emergency unless, within 90 days before the anniversary date of its declaration, the President publishes in the Federal Register and transmits to the Congress a notice stating that the emergency is to continue in effect bevond the anniversary date. In accordance with this provision, I have sent to the Federal Register for publication the enclosed notice stating that the national emergency declared in Executive Order 13692 of March 8, 2015, with respect to the situation in Venezuela is to continue in effect beyond March 8, 2020

The situation in Venezuela continues to pose an unusual and extraordinary threat to the national security and foreign policy of the United States. For this reason, I have determined that it is necessary to continue the national emergency declared in Executive Order 13692 with respect to the situation in Venezuela.

DONALD J. TRUMP. THE WHITE HOUSE, March 5, 2020.

MESSAGES FROM THE HOUSE

At 10:10 a.m., a message from the House of Representatives, delivered by

Mrs. Cole, one of its reading clerks, announced that the House has agreed to the following concurrent resolutions, in which it requests the concurrence of the Senate:

H. Con. Res. 87. Concurrent resolution authorizing the use of Emancipation Hall for a ceremony as part of the commemoration of the days of remembrance of victims of the Holocaust.

H. Con. Res. 91. Concurrent resolution authorizing the use of Emancipation Hall in the Capitol Visitor Center for a ceremony to present the Congressional Gold Medal collectively to the Chinese-American veterans of World War II.

The message also announced that the House has passed the following bill, with an amendment, in which it requests the concurrence of the Senate:

S. 1678. An act to express United States support for Taiwan's diplomatic alliances around the world.

The message further announced that pursuant to the National Foundation on the Arts and the Humanities Act of 1965 (20 U.S.C. 955(b)), and the order of the House of January 3, 2019, the Speaker appoints the following Member on the part of the House of Representatives to the National Council on the Arts: Ms. Adams of North Carolina.

The message also announced that pursuant to 10 U.S.C. 9455(a), and the order of the House of January 3, 2019, the Speaker appoints the following Member on the part of the House of Representatives to the Board of Visitors to the United States Air Force Academy: Mr. Lieu of California.

At 1:29 p.m., a message from the House of Representatives, delivered by Mrs. Cole, one of its reading clerks, announced that the House has passed the following bills, in which it requests the concurrence of the Senate:

H.R. 1140. An act to enhance the security operations of the Transportation Security Administration and stability of the transportation security workforce by applying the personnel system under title 5, United States Code, to employees of the Transportation Security Administration who provide screening of all passengers and property, and for other purposes.

ENROLLED BILL SIGNED

At 3:45 p.m., a message from the House of Representatives, delivered by Mrs. Cole, one of its reading clerks, announced that the Speaker has signed the following enrolled bill:

H.R. 6074. An act making emergency supplemental appropriations for the fiscal year ending September 30, 2020, and for other purposes.

The enrolled bill was subsequently signed by the President pro tempore (Mr. Grassley).

MEASURES REFERRED

The following bill was read the first and the second times by unanimous consent, and referred as indicated:

H.R. 1140. An act to enhance the security operations of the Transportation Security Administration and stability of the transportation security workforce by applying the

personnel system under title 5, United States Code, to employees of the Transportation Security Administration who provide screening of all passengers and property, and for other purposes; to the Committee on Commerce, Science, and Transportation.

EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents, and were referred as indicated:

EC-4190. A communication from the Director of the Regulations Management Team, Rural Utilities Service, Department of Agriculture, transmitting, pursuant to law, the report of a rule entitled "Rural Broadband Loans, Loan/Grant Combinations, and Loan Guarantees" (RIN0572-AC46) received in the Office of the President of the Senate on February 25, 2020; to the Committee on Agriculture, Nutrition, and Forestry.

EC-4191. A communication from the Secretary of Defense, transmitting, pursuant to law, a report relative to a review of the National Military Strategy (NMS) by the Chairman of the Joint Chiefs of Staff and Combatant Commanders (OSS-2020-0294); to the Committee on Armed Services.

EC-4192. A communication from the Alternate Federal Register Liaison Officer, Office of the Secretary, Department of Defense, transmitting, pursuant to law, the report of a rule entitled "Civil Monetary Penalty Inflation Adjustment" (RIN0790-AK88) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Armed Services.

EC-4193. A communication from the Assistant Secretary of Defense (Legislative Affairs), transmitting additional legislative proposals relative to the "National Defense Authorization Act for Fiscal Year 2021"; to the Committee on Armed Services.

EC-4194. A communication from the Secretary of the Treasury, transmitting, pursuant to law, a six-month periodic report on the national emergency with respect to Somalia that was declared in Executive Order 13536 on April 12, 2010; to the Committee on Banking, Housing, and Urban Affairs.

EC-4195. A communication from the Secretary of the Treasury, transmitting, pursuant to law, a six-month periodic report on the national emergency with respect to South Sudan that was declared in Executive Order 13664 of April 3, 2014; to the Committee on Banking, Housing, and Urban Affairs.

EC-4196. A communication from the Secretary, Securities and Exchange Commission, transmitting, pursuant to law, the report of a rule entitled "Financial Disclosures about Guarantors and Issuers of Guaranteed Securities and Affiliates Whose Securities" (RIN3235-AM12) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Banking, Housing, and Urban Affairs.

EC-4197. A communication from the Assistant General Counsel for Legislation, Regulation and Energy Efficiency, Department of Energy, transmitting, pursuant to law, the report of a rule entitled "Energy Conservation Program for Appliance Standards: Procedures for Use in New or Revised Energy Conservation Standards and Test Procedures for Consumer Products and Commercial/Industrial Equipment" ((RIN1904-AD38) (10 CFR Parts 430 and 431)) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Energy and Natural Resources.

EC-4198. A communication from the Acting Chief of the Regulations and Standards

Branch, Bureau of Safety and Environmental Enforcement, Department of the Interior, transmitting, pursuant to law, the report of a rule entitled "Oil and Gas and Sulfur Operations on the Outer Continental Shelf - Civil Penalty Inflation Adjustment" (RIN1014–AA47) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Energy and Natural Resources.

EC-4199. A communication from the Director of Congressional Affairs, Office of Enforcement, Nuclear Regulatory Commission, transmitting, pursuant to law, the report of a rule entitled "Enforcement Guidance Memorandum (EGM) 2020-001, Enforcement Discretion Not to Cite Certain Violations of 10 CFR 73.56 Requirements" (RIN3150-A112) received in the Office of the President of the Senate on March 2, 2020; to the Committee on Environment and Public Works.

EC-4200. A communication from the United States Trade Representative, Executive Office of the President, transmitting, pursuant to law, the 2020 Trade Policy Agenda and 2019 Annual Report of the President of the United States on the Trade Agreements Program; to the Committee on Finance.

EC-4201. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Beginning of Construction for the Credit for Carbon Oxide Sequestration under Section 45Q" (Notice 2020–12) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Finance.

EC-4202. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "2020 Calendar Year Resident Population Figures" (Notice 2020–10) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Finance.

EC-4203. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Revenue Procedure: Exemption from Section 6048 Reporting With Respect to Certain Tax-Favored Foreign Retirement and Non-Retirement Savings Trusts" (Rev. Proc. 2020-17) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Finance.

EC-4204. A communication from the Regulations Writer, Office of Regulations and Reports Clearance, Social Security Administration, transmitting, pursuant to law, the report of a rule entitled "Extension of Expiration Dates for Three Body System Listings" (RIN0960-AI46) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Finance.

EC-4205. A communication from the Assistant Legal Advisor for Treaty Affairs, Department to State, transmitting, pursuant to law, the report of International Agreements other than Treaties entered into with Taiwan by the American Institute in Taiwan; to the Committee on Foreign Relations.

EC-4206. A communication from the Secretary of the Treasury, transmitting, pursuant to law, a six-month periodic report on the national emergency with respect to significant malicious cyber-enabled activities that was declared in Executive Order 13694 of April 1, 2015; to the Committee on Foreign Relations.

EC-4207. A communication from the Assistant Secretary, Legislative Affairs, Department of State, transmitting, pursuant to law, a report relative to the submission of the 2020 Report on Implementation of the New START Treaty, and the 2020 Certification and Report on Technical Collection

for the New START Treaty; to the Committee on Foreign Relations.

EC-4208. A communication from the Assistant Secretary, Legislative Affairs, Department of State, transmitting, pursuant to law, a report relative to technical collection for the New START Treaty (OSS-2020-0293); to the Committee on Foreign Relations.

EC-4209. A communication from the Acting Assistant Secretary for Legislation, Department of Health and Human Services, transmitting, pursuant to law, a report entitled "Fiscal Year 2018 Performance Report to Congress for the Office of Combination Products"; to the Committee on Health, Education, Labor, and Pensions.

EC-4210. A communication from the Acting Assistant Secretary for Legislation, Department of Health and Human Services, transmitting, pursuant to law, a report entitled "Fiscal Year (FY) 2019 Financial Report for the Medical Device User Fee Amendments"; to the Committee on Health, Education, Labor, and Pensions.

EC-4211. A communication from the Director of Regulations and Policy Management Staff, Food and Drug Administration, Department of Health and Human Services, transmitting, pursuant to law, the report of a rule entitled "Food Additive Regulations; Synthetic Flavoring Agents and Adjuvants; Confirmation of Effective Date" ((21 CFR Parts 172 and 177) (Docket No. FDA-2015-F-4317)) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Health, Education, Labor, and Pensions.

EC-4212. A communication from the Director of Regulations and Policy Management Staff, Food and Drug Administration, Department of Health and Human Services, transmitting, pursuant to law, the report of a rule entitled "Definition of the Term 'Biological Product'" (RIN0910-AH57) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Health, Education, Labor, and Pensions.

EC-4213. A communication from the Deputy Assistant General Counsel for Regulatory Affairs, Pension Benefit Guaranty Corporation, transmitting, pursuant to law, the report of a rule entitled "Benefits Payable in Terminated Single-Employer Plans; Interest Assumptions for Paying Benefits" (29 CFR Part 4022) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Health, Education, Labor, and Pensions.

EC-4214. A communication from the Deputy Assistant General Counsel for Regulatory Affairs, Pension Benefit Guaranty Corporation, transmitting, pursuant to law, the report of a rule entitled "Administrative Review of Agency Decisions" (RIN1212-AB35) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Health, Education, Labor, and Pensions.

EC-4215. A communication from the District of Columbia Auditor, transmitting, pursuant to law, a report entitled "Earmark Review: DMPED Can Improve Grant Management"; to the Committee on Homeland Security and Governmental Affairs.

EC-4216. A communication from the Acting Director, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pollock in Statistical Area 620 in the Gulf of Alaska" (RIN0648-XY070) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4217. A communication from the Deputy Assistant Administrator, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Car-

ibbean, Gulf of Mexico, and South Atlantic; Electronic Reporting for Federally Permitted Charter Vessels and Headboats in Atlantic Fisheries" (RIN0648-BG75) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4218. A communication from the Acting Director, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Reef Fish Fishery of the Gulf of Mexico; 2020 Recreational Accountability Measure and Closure for Gulf of Mexico Gray Triggerfish" (RIN0648-XS023) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4219. A communication from the Deputy Assistant Administrator, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Final Rule to Modify IFQ Program Medical and Beneficiary Transfer Provisions" (RIN0648-BJ07) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4220. A communication from the Deputy Assistant Administrator, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the States; Blueline Northeastern United Fishery; Tilefish 2020 Specifications' (RIN0648-XX037) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4221. A communication from the Deputy Assistant Administrator, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to U.S. Navy Construction Activities at Naval Weapons Station Seal Beach, California" (RIN0648-BH28) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4222. A communication from the Deputy Assistant Administrator, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Coastal Migratory Pelagic Resources of the Gulf of Mexico and Atlantic; Framework Amendment 7" (RIN0648-BI83) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4223. A communication from the Attorney, Regulatory Affairs, Consumer Product Safety Commission, transmitting, pursuant to law, the report of a rule entitled "Revisions to Safety Standard for Portable Bed Rails" (16 CFR Part 1224) received in the Office of the President of the Senate on March 4, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4224. A communication from the Attorney Adviser, Federal Railroad Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "System Safety Program and Risk Reduction Program: Final Rule" (RIN2130–AC73) received in the Office of the President of the Senate on March 3, 2020; to the Committee on Commerce, Science, and Transportation.

EC-4225. A communication from the Deputy Bureau Chief, Wireline Competition Bureau, Federal Communications Commission, transmitting, pursuant to law, the report of a rule entitled "Uniendo a Puerto Rico Fund and Connect USVI Fund Notice and Filing Requirements and Other Procedures for

Stage 2 Fixed Competitive Proposal Process' ((RIN3060-AK57) (WC Docket No. 18-143, 10-90, and 14-58)) received during adjournment of the Senate in the Office of the President of the Senate on February 28, 2020; to the Committee on Commerce, Science, and Transportation.

REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. SHELBY, from the Committee on Appropriations:

Special Report entitled "Further Revised Allocation to Subcommittees of Budget Totals for Fiscal Year 2020" (Rept. No. 116–223).

EXECUTIVE REPORTS OF COMMITTEE

The following executive reports of nominations were submitted:

By Mr. GRAHAM for the Committee on the Judiciary.

John Charles Hinderaker, of Arizona, to be United States District Judge for the District of Arizona.

Mark C. Scarsi, of California, to be United States District Judge for the Central District of California.

Stanley Blumenfeld, of California, to be United States District Judge for the Central District of California.

Fernando L. Aenlle-Rocha, of California, to be United States District Judge for the Central District of California.

Grace Karaffa Obermann, of Virginia, to be a Judge of the United States Court of Federal Claims for a term of fifteen years.

(Nominations without an asterisk were reported with the recommendation that they be confirmed.)

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first and second times by unanimous consent, and referred as indicated:

By Mr. THUNE (for himself, Ms. STABENOW, Mrs. FISCHER, and Mr. WARNER):

S. 3394. A bill to amend the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 to include a trade negotiating objective relating to addressing the security of the global communications infrastructure; to the Committee on Finance.

By Ms. HIRONO (for herself and Mr. SULLIVAN):

S. 3395. A bill to require consultations on reuniting Korean Americans with family members in North Korea; to the Committee on Foreign Relations.

By Mr. BRAUN:

S. 3396. A bill to authorize the posthumous honorary promotion to general of Lieutenant General Frank Maxwell Andrews, United States Army; to the Committee on Armed Services.

By Mr. SCHATZ (for himself, Mr. Brown, Mr. Merkley, Mr. Booker, Ms. Warren, and Ms. Rosen):

S. 3397. A bill to amend the Elementary and Secondary Education Act of 1965 by establishing a program to support the modernization, renovation, or repair of career and technical education facilities, to enable schools serving grades 6 through 12 that are located in rural areas or that serve Native American students to remodel or build new facilities to provide STEM classrooms and

laboratories and support high-speed internet, and for other purposes; to the Committee on Health, Education, Labor, and Pensions.

By Mr. GRAHAM (for himself, Mr. BLUMENTHAL, Mr. CRAMER, Mrs. FEINSTEIN, Mr. HAWLEY, Mr. JONES, Mr. CASEY, Mr. WHITEHOUSE, Mr. DURBIN, and Ms. ERNST):

S. 3398. A bill to establish a National Commission on Online Child Sexual Exploitation Prevention, and for other purposes; to the Committee on the Judiciary.

By Mr. TESTER (for himself and Mr. HOEVEN):

S. 3399. A bill to extend the Frontier Community Health Integration Project Demonstration; to the Committee on Finance.

By Mr. BLUMENTHAL (for himself, Mr. Markey, Mr. Whitehouse, Ms. Harris, Ms. Hirono, Mr. Van Hollen, Mr. Merkley, Mr. Peters, Mr. Sanders, Mr. Brown, Mr. Durbin, Mr. Booker, and Mr. Leahy):

S. 3400. A bill to amend title 49, United States Code, to prohibit Amtrak from including mandatory arbitration clauses in contracts of carriage, and for other purposes; to the Committee on Commerce, Science, and Transportation.

By Mr. CRUZ (for himself and Mr. CAS-SIDY):

S. 3401. A bill to amend title II of the Social Security Act to replace the windfall elimination provision with a formula equalizing benefits for certain individuals with noncovered employment, and for other purposes; to the Committee on Finance.

By Mr. WYDEN:

S. 3402. A bill to amend chapter 37 of title 18, United States Code, to authorize appropriate disclosure of classified information, to appropriately limit the scope of the offense of disclosing classified information, and for other purposes; to the Committee on the Judiciary.

By Mr. BLUNT (for himself, Mr. Grassley, Mr. Roberts, Mr. Moran, Mrs. Fischer, Mr. Hawley, Ms. Ernst, and Mr. Sasse):

S. 3403. A bill to establish a lower Missouri River flood prevention program, and for other purposes; to the Committee on Environment and Public Works.

By Mr. BURR (for himself and Mr. BENNET):

S. 3404. A bill to amend the Federal Food, Drug, and Cosmetic Act to provide for the regulation of in vitro clinical tests, and for other purposes; to the Committee on Health, Education, Labor, and Pensions.

By Mr. BOOKER:

S. 3405. A bill to strengthen student achievement and graduation rates and prepare children and youth for college, careers, and citizenship through innovative partnerships that meet the comprehensive needs of children and youth; to the Committee on Health, Education, Labor, and Pensions.

By Ms. DUCKWORTH (for herself, Mr. SCOTT of South Carolina, Mr. CARDIN, and Ms. COLLINS):

S. 3406. A bill to reauthorize the Interagency Committee on Women's Business Enterprise, and for other purposes; to the Committee on Small Business and Entrepreneurship.

By Mr. RUBIO (for himself and Mr. SCOTT of Florida):

S. 3407. A bill to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to provide for the authority to reimburse local governments for interest expenses, and for other purposes; to the Committee on Homeland Security and Governmental Affairs.

By Ms. SINEMA (for herself and Mrs. BLACKBURN):

S. 3408. A bill to amend title 38, United States Code, to authorize the Secretary of

Veterans Affairs to enter into contracts and agreements for the placement of veterans in non-Department medical foster homes for certain veterans who are unable to live independently; to the Committee on Veterans' Affairs.

By Mr. SCOTT of Florida (for himself and Ms. ERNST):

S. 3409. A bill to modify the conditions and terms of all foreign military training programs operated within the United States by the Department of Defense and the Department of State; to the Committee on the Judiciary.

By Mr. CASSIDY (for himself and Mr. CASEY):

S. 3410. A bill to amend the Higher Education Act of 1965 to improve access to post-secondary instructional materials for students with print disabilities; to the Committee on Health, Education, Labor, and Pensions.

By Mr. MARKEY (for himself and Mr. BLUMENTHAL):

S. 3411. A bill to keep children safe and protect their interests on the internet, and for other purposes; to the Committee on Commerce, Science, and Transportation.

By Mr. LANKFORD:

S. 3412. A bill to require a guidance clarity statement on certain agency guidance, and for other purposes; to the Committee on Homeland Security and Governmental Affairs.

By Ms. CORTEZ MASTO (for herself and Mr. ROMNEY):

S. 3413. A bill to direct the Director of the Bureau of Land Management to study the effects of drone incursions on wildfire suppression, and for other purposes; to the Committee on Energy and Natural Resources.

By Mr. MORAN (for himself and Mr. TESTER):

S. 3414. A bill to authorize major medical facility projects for the Department of Veterans Affairs for fiscal year 2020, and for other purposes; considered and passed.

By Mrs. MURRAY (for herself, Mr. Schumer, Mr. Durbin, Mr. Heinrich, Mr. Van Hollen, and Mr. Brown):

S. 3415. A bill to allow Americans to earn paid sick time so that they can address their own health needs and the health needs of their families; to the Committee on Health, Education, Labor, and Pensions.

By Mr. JOHNSON:

S. 3416. A bill to reauthorize the Chemical Facility Anti-Terrorism Standards Program of the Department of Homeland Security; to the Committee on Homeland Security and Governmental Affairs.

SUBMISSION OF CONCURRENT AND SENATE RESOLUTIONS

The following concurrent resolutions and Senate resolutions were read, and referred (or acted upon), as indicated:

By Mr. RUBIO (for himself, Mr. MENENDEZ, Mr. CRUZ, Mr. CARDIN, and Mr. SCOTT of Florida):

S. Res. 531. A resolution honoring Las Damas de Blanco, a women-led nonviolent movement in support of freedom and human rights in Cuba, and calling for the release of all political prisoners in Cuba; to the Committee on Foreign Relations.

By Mr. HAWLEY (for himself, Mr. Daines, Mr. Braun, Mr. Scott of Florida, Mr. Tillis, Mrs. Loeffler, Mr. Cramer, Mr. Sasse, Ms. Ernst, Mr. Lee, Mr. Cruz, Mr. Perdue, Mr. Scott of South Carolina, Mr. Inhofe, and Ms. McSally):

S. Res. 532. A resolution condemning and censuring the Senator from New York, Mr.

Schumer; to the Select Committee on Ethics.

By Mrs. SHAHEEN (for herself, Ms. COLLINS, Mr. MURPHY, and Ms. BALDWIN):

S. Res. 533. A resolution supporting the goals of International Women's Day; to the Committee on Foreign Relations.

By Ms. ROSEN (for herself and Mr. MORAN):

S. Res. 534. A resolution designating March 2 through March 8, 2020, as "Women of the Aviation Workforce Week"; to the Committee on the Judiciary.

By Ms. COLLINS (for herself, Ms. SINEMA, Ms. McSALLY, and Mr. CASEY):

S. Res. 535. A resolution designating March 5, 2020, as "National 'Slam the Scam' Day" to raise awareness about the increasing number of government imposter scams, to encourage the implementation of policies to prevent government imposter scams, and to encourage the improvement of protections from government imposter scams for the people of the United States; considered and agreed to.

ADDITIONAL COSPONSORS

S. 208

At the request of Mr. Tester, the name of the Senator from Vermont (Mr. Leahy) was added as a cosponsor of S. 208, a bill to amend title 10, United States Code, to permit certain retired members of the uniformed services who have a service-connected disability to receive both disability compensation from the Department of Veterans Affairs for their disability and either retired pay by reason of their years of military service or Combat-Related Special Compensation, and for other purposes.

S. 521

At the request of Mr. Brown, the name of the Senator from Louisiana (Mr. CASSIDY) was added as a cosponsor of S. 521, a bill to amend title II of the Social Security Act to repeal the Government pension offset and windfall elimination provisions.

S. 578

At the request of Mr. Whitehouse, the names of the Senator from Washington (Ms. Cantwell) and the Senator from New Mexico (Mr. Heinrich) were added as cosponsors of S. 578, a bill to amend title II of the Social Security Act to eliminate the five-month waiting period for disability insurance benefits under such title for individuals with amyotrophic lateral sclerosis.

S. 604

At the request of Mr. Thune, the name of the Senator from Florida (Mr. Rubio) was added as a cosponsor of S. 604, a bill to limit the authority of States to tax certain income of employees for employment duties performed in other States.

S. 633

At the request of Mr. Moran, the name of the Senator from Connecticut (Mr. Murphy) was added as a cosponsor of S. 633, a bill to award a Congressional Gold Medal to the members of the Women's Army Corps who were assigned to the 6888th Central Postal Di-

rectory Battalion, known as the "Six Triple Eight".

S 670

At the request of Mr. Rubio, the name of the Senator from Alabama (Mr. Jones) was added as a cosponsor of S. 670, a bill to make daylight savings time permanent, and for other purposes.

S. 866

At the request of Mr. VAN HOLLEN, the name of the Senator from Minnesota (Ms. SMITH) was added as a cosponsor of S. 866, a bill to amend part B of the Individuals with Disabilities Education Act to provide full Federal funding of such part.

S. 944

At the request of Mr. SCHATZ, the name of the Senator from Connecticut (Mr. MURPHY) was added as a cosponsor of S. 944, a bill to enhance the security operations of the Transportation Security Administration and the stability of the transportation security workforce by applying a unified personnel system under title 5, United States Code, to employees of the Transportation Security Administration who are responsible for screening passengers and property, and for other purposes.

S. 1015

At the request of Mr. Burr, the name of the Senator from Louisiana (Mr. Cassidy) was added as a cosponsor of S. 1015, a bill to require the Director of the Office of Management and Budget to review and make certain revisions to the Standard Occupational Classification System, and for other purposes.

S. 1781

At the request of Mr. Rubio, the name of the Senator from Wisconsin (Ms. Baldwin) was added as a cosponsor of S. 1781, a bill to authorize appropriations for the Department of State for fiscal years 2020 through 2022 to provide assistance to El Salvador, Guatemala, and Honduras through bilateral compacts to increase protection of women and children in their homes and communities and reduce female homicides, domestic violence, and sexual assault.

S. 1903

At the request of Ms. SMITH, the name of the Senator from New York (Mrs. GILLIBRAND) was added as a cosponsor of S. 1903, a bill to establish an interagency One Health Program, and for other purposes.

S. 2085

At the request of Ms. Rosen, the names of the Senator from Michigan (Mr. Peters) and the Senator from Rhode Island (Mr. Whitehouse) were added as cosponsors of S. 2085, a bill to authorize the Secretary of Education to award grants to eligible entities to carry out educational programs about the Holocaust, and for other purposes.

S. 2110

At the request of Mr. Murphy, the name of the Senator from Minnesota

(Ms. SMITH) was added as a cosponsor of S. 2110, a bill to address food and housing insecurity on college campuses.

S. 2143

At the request of Mr. Bennet, his name was added as a cosponsor of S. 2143, a bill to amend the Food and Nutrition Act of 2008 to expand the eligibility of students to participate in the supplemental nutrition assistance program, and for other purposes.

S. 2723

At the request of Ms. Collins, the names of the Senator from Ohio (Mr. Portman), the Senator from Maryland (Mr. Cardin) and the Senator from New York (Mrs. Gillibrand) were added as cosponsors of S. 2723, a bill to amend the Federal Food, Drug, and Cosmetic Act to reduce drug storages, and for other purposes.

S. 2754

At the request of Mr. Kennedy, the names of the Senator from Utah (Mr. Romney) and the Senator from Colorado (Mr. Bennet) were added as cosponsors of S. 2754, a bill to create jobs and drive innovation and economic growth in the United States by supporting and promoting the manufacture of next-generation technologies, including refrigerants, solvents, fire suppressants, foam blowing agents, aerosols, and propellants.

S. 3116

At the request of Ms. Collins, the name of the Senator from Minnesota (Ms. SMITH) was added as a cosponsor of S. 3116, a bill to enable States to better provide access to whole genome sequencing clinical services for certain undiagnosed children under the Medicaid program, and for other purposes.

S. 3146

At the request of Mr. Cardin, the name of the Senator from Wisconsin (Ms. Baldwin) was added as a cosponsor of S. 3146, a bill to ensure a fair process for negotiations of collective bargaining agreements under chapter 71 of title 5, United States Code.

S. 3231

At the request of Mr. SCHATZ, the names of the Senator from California (Ms. HARRIS) and the Senator from Wisconsin (Ms. BALDWIN) were added as cosponsors of S. 3231, a bill to increase the rates of pay under the General Schedule and other statutory pay systems and for prevailing rate employees by 3.5 percent, and for other purposes.

S. 3249

At the request of Mr. Johnson, the name of the Senator from Wisconsin (Ms. Baldwin) was added as a cosponsor of S. 3249, a bill to amend the FAST Act to modify a provision relating to the Motorcyclist Advisory Council.

S. 3334

At the request of Ms. Duckworth, the name of the Senator from New Mexico (Mr. Udall) was added as a cosponsor of S. 3334, a bill to require the publication of opinions issued by the Office of Legal Counsel of the Department of Justice, and for other purposes.

S 3350

At the request of Mr. CRAPO, the names of the Senator from Missouri (Mr. HAWLEY) and the Senator from Tennessee (Mr. ALEXANDER) were added as cosponsors of S. 3350, a bill to amend title XVIII of the Social Security Act to deem certain State Veterans homes meeting certain health and safety standards as meeting conditions and requirements for skilled nursing facilities under the Medicare and Medicaid programs.

S. 3379

At the request of Mr. MURPHY, the name of the Senator from Connecticut (Mr. BLUMENTHAL) was added as a cosponsor of S. 3379, a bill to block the implementation of a recent presidential proclamation restricting individuals from certain countries from entering the United States.

S. RES. 507

At the request of Mr. Blumenthal, the names of the Senator from Montana (Mr. Daines) and the Senator from Montana (Mr. Tester) were added as cosponsors of S. Res. 507, a resolution supporting Minor League Baseball.

S. RES. 509

At the request of Mr. Toomey, the names of the Senator from West Virginia (Mrs. Capito), the Senator from Nevada (Ms. Cortez Masto), the Senator from South Dakota (Mr. Rounds) and the Senator from Michigan (Mr. Peters) were added as cosponsors of S. Res. 509, a resolution calling upon the United Nations Security Council to adopt a resolution on Iran that extends the dates by which Annex B restrictions under Resolution 2231 are currently set to expire.

S. RES. 527

At the request of Mr. CARDIN, the name of the Senator from Alaska (Ms. MURKOWSKI) was added as a cosponsor of S. Res. 527, a resolution recognizing the longstanding partnership between the United States and Australia to share critical firefighting resources during times of crisis.

AMENDMENT NO. 1357

At the request of Mrs. FEINSTEIN, the name of the Senator from California (Ms. Harris) was added as a cosponsor of amendment No. 1357 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1359

At the request of Mrs. FEINSTEIN, the name of the Senator from California (Ms. Harris) was added as a cosponsor of amendment No. 1359 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1370

At the request of Ms. STABENOW, the name of the Senator from Rhode Island (Mr. REED) was added as a cosponsor of

amendment No. 1370 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1374

At the request of Mrs. Capito, the name of the Senator from Montana (Mr. Daines) was added as a cosponsor of amendment No. 1374 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1384

At the request of Mrs. Shaheen, the name of the Senator from Rhode Island (Mr. Reed) was added as a cosponsor of amendment No. 1384 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1391

At the request of Mr. KING, the name of the Senator from Maryland (Mr. CARDIN) was added as a cosponsor of amendment No. 1391 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1412

At the request of Mr. MENENDEZ, the name of the Senator from Idaho (Mr. RISCH) was added as a cosponsor of amendment No. 1412 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

AMENDMENT NO. 1413

At the request of Mr. MENENDEZ, the name of the Senator from Idaho (Mr. RISCH) was added as a cosponsor of amendment No. 1413 intended to be proposed to S. 2657, a bill to support innovation in advanced geothermal research and development, and for other purposes.

STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. THUNE (for himself, Ms. STABENOW, Mrs. FISCHER, and Mr. WARNER):

S. 3394. A bill to amend the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 to include a trade negotiating objective relating to addressing the security of the global communications infrastructure; to the Committee on Finance.

Mr. THUNE. Mr. President, I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the text of the bill was ordered to be printed in the RECORD, as follows:

S. 3394

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 "Network Security Trade Act of 2020".

SEC. 2. TRADE NEGOTIATING OBJECTIVE RELAT-ING TO SECURITY OF COMMUNICA-TIONS NETWORKS.

Section 102(a) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (19 U.S.C. 4201(a)) is amended—

- (1) in paragraph (14), by striking "; and" and inserting a semicolon:
- (2) in paragraph (15), by striking the period at the end and inserting "; and"; and
- (3) by adding at the end the following:
- "(16) to ensure that the equipment and technology that create the global communications infrastructure are not compromised by addressing—
- "(A) barriers to the security of communications networks and supply chains; and
- "(B) unfair trade practices of suppliers of communications equipment that are owned, controlled, or supported by a foreign government.".

By Mr. MORAN (for himself and Mr. TESTER):

S. 3414. A bill to authorize major medical facility projects for the Department of Veterans Affairs for fiscal year 2020, and for other purposes; considered and passed.

S. 3414

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 "Major Medical Facility Authorization Act of 2020".

SEC. 2. AUTHORIZATION OF MAJOR MEDICAL FA-CILITY PROJECTS OF DEPARTMENT OF VETERANS AFFAIRS FOR FISCAL YEAR 2020.

- (a) IN GENERAL.—The Secretary of Veterans Affairs may carry out the following major medical facility projects in fiscal year 2020 at the locations specified and in an amount for each project not to exceed the amount specified for such location:
- (1) Construction of an outpatient clinic and national cemetery in Alameda, California, in an amount not to exceed \$113,332,000.
- (2) Realignment and closure of the Livermore Campus in Livermore, California, in an amount not to exceed \$311,730,000.
- (3) Construction of a new medical facility in Louisville, Kentucky, in an amount not to exceed \$860,000,000.
- (4) Construction relating to flood recovery of the medical center in Manhattan, New York, in an amount not to exceed \$372,600,000.
- (5) Construction of a spinal cord injury building with a community living center, including a parking garage, in San Diego, California, in an amount not to exceed \$230,840,000.
- (6) Completion of construction of a medical facility project, including a parking garage, in San Juan, Puerto Rico, in an amount not to exceed \$307,000,000.
- (7) Construction of a new critical care center in West Los Angeles, California, in an amount not to exceed \$75.790.000.
- (b) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary of Veterans Affairs for fiscal year 2020 or the year in which funds are appropriated for the Construction, Major Projects account, \$2,271,292,000 for the projects authorized in subsection (a).

SUBMITTED RESOLUTIONS

SENATE RESOLUTION 531—HON-ORING LAS DAMAS DE BLANCO, A WOMEN-LED NONVIOLENT MOVEMENT IN SUPPORT OF FREEDOM AND HUMAN RIGHTS IN CUBA, AND CALLING FOR THE RELEASE OF ALL POLITICAL PRISONERS IN CUBA

Mr. RUBIO (for himself, Mr. MENENDEZ, Mr. CRUZ, Mr. CARDIN, and Mr. SCOTT of Florida) submitted the following resolution; which was referred to the Committee on Foreign Relations:

S. RES. 531

Whereas Las Damas de Blanco (also known as the "Ladies in White") is a group composed of wives and relatives of political prisoners, prisoners of conscience, and peaceful dissidents in Cuba:

Whereas, in April 2003, during the wave of repression known as the "Black Spring", a group of strong and courageous women formed Las Damas de Blanco in response to the wrongful imprisonment of their family members by the Cuban regime;

Whereas members of Las Damas de Blanco continue attempting to attend Sunday mass in the Church of Santa Rita de Casia in Havana, and other churches throughout different provinces in Cuba, and then march peacefully through the streets of Havana holding gladiolus despite the Cuban regime's constant efforts to block their nonviolent exercise of freedom of assembly and speech;

Whereas members of Las Damas de Blanco regularly march to advocate for the release of all political prisoners and the freedom of the Cuban people;

Whereas, despite exercising their fundamental rights to freedom of expression and assembly, members of Las Damas de Blanco are regularly attacked by security forces and mobs organized by the Cuban regime:

Whereas, according to Amnesty International—

(1) Las Damas de Blanco "remain[s] one of the primary targets of repression by Cuban [G]overnment authorities"; and

(2) members of Las Damas de Blanco are frequently detained and "often beaten by law enforcement officials and state security agents dressed as civilians" while in detention;

Whereas, according to the Human Rights Watch 2019 World Report, in Cuba "detention is often used preemptively to prevent people from participating in peaceful marches or meetings to discuss politics, and detainees are often beaten, threatened, and held incommunicado for hours or days":

Whereas the Human Rights Watch 2019 World Report noted that "Cuban Police or state security agents continue to routinely harass, rough up, and detain members of Las Damas de Blanco before or after they attend Sunday mass";

Whereas, in 2005, Las Damas de Blanco were selected to receive the Sakharov Prize for Freedom of Thought, but the Cuban regime did not allow members of the group to leave the island to accept the award;

Whereas Laura Ines Pollán Toledo, the founder of Las Damas de Blanco, left a legacy of peaceful protest against human and civil rights abuses in Cuba;

Whereas Laura Ines Pollán Toledo died on October 14, 2011, and while her death garnered widespread international attention, the Cuban regime remained silent;

Whereas, in February 2015, 30 members of Las Damas de Blanco were arrested in an attempt by Cuban officials to bar the women from participating in marches, which sought to advocate for the freedom of political prisoners in Cuba;

Whereas, while Raúl Castro is no longer the head of Cuba, grave human rights abuses continue under the current President of Cuba, Miguel Díaz-Canel;

Whereas Las Damas de Blanco has appealed to the United States Government and other foreign governments in order to bring international attention to the repression of dissidents by the Cuban regime and the plight of political prisoners, who are routinely jailed unjustly and without due process:

Whereas, on May 17, 2018, Las Damas de Blanco received the prestigious 2018 Milton Friedman Prize for Advancing Liberty for the bravery of the group and the continuing efforts of the group to fight for individual freedom in Cuba:

Whereas Berta de los Angeles Soler Fernández and Leticia Ramos Herreria, members of Las Damas de Blanco, were prohibited by the Díaz-Canel regime from leaving Cuba to accept the 2018 Milton Friedman Prize for Advancing Liberty in the United States;

Whereas, on May 6, 2018, Avmara Nieto Muñoz, a member of the Damas de Blanco, was violently arrested and during her transfer in a patrol car, a uniformed cop beat her, causing Nieto to require medical attention:

Whereas, following 10 days of confinement in a cell of the Santiago de las Vegas-La Habana, Aymara Nieto Muñoz was transferred to Havana's women's prison, known as the Guatao, and remains detained pending a trial for an alleged "crime of attack" with other prisoners arrested for petty crimes;

Whereas it is the second time that Aymara Nieto Muñoz, has been imprisoned for political reasons, and during a politically charged trial on June 3, 2017, she was sentenced to one year of prison for an alleged crime of public disorder:

Whereas, in March 2018, Marta Sánchez González was arrested for peacefully protesting and transferred to a women's prison a month later:

Whereas, on August 2018, Marta Sánchez González faced a rigged trial and was sentenced to 4 years and 6 months of imprisonment alongside prisoners for common crimes:

Whereas, throughout 2019, Las Damas de Blanco experienced countless arrests, acts of repression, and violent attacks intended to imperil their physical and mental state as a result of their peaceful advocacy of the release of all political prisoners:

Whereas the total number of arrests in 2019 conducted by the Cuban Police against Las Damas de Blanco is 1,120, including those of Berta Soler Fernández, who has been constantly harassed, violently attacked, and detained for lengthy periods of time, and Xiomara de las Mercedes Cruz Miranda, who was imprisoned in 2018;

Whereas, upon entering prison the first time on April 15, 2016, Ms. Cruz Miranda was in good health, but after being sent to prison for the second time in 2018, she acquired a rare skin disease in the women's prison in Ciego de Ávila and her health began to be affected by several conditions, including tuberculosis, which severely damaged her respiratory system and her mental and physical health: and

Whereas Ms. Cruz Miranda remained hospitalized for more than 6 months in Cuba, and after her health condition failed to stabilize, she was admitted to Jackson South Hospital in the City of Miami on January 2020, thanks to a humanitarian visa granted by the United States Government: Now, therefore, be it:

Resolved. That the Senate-

- (1) honors the courageous members of Las Damas de Blanco for their peaceful efforts to speak up for the voiceless and stand up to the Cuban regime in defense of human rights and fundamental freedoms, such as freedom of expression and assembly;
- (2) recognizes the brave leaders of Las Damas de Blanco, including Marta Sánchez and Aymara Nieto Muñoz, who are currently in prison due to their peaceful activism;
- (3) expresses solidarity with the Cuban people and a commitment to the democratic aspirations of those Cubans calling for a free Cuba:
- (4) calls on the Cuban regime to allow members of Las Damas de Blanco to attend weekly masses and travel freely both domestically and internationally; and
- (5) calls for the release of all political prisoners detained and imprisoned by the Cuban regime.

SENATE RESOLUTION 532—CONDEMNING AND CENSURING THE SENATOR FROM NEW YORK, MR. SCHUMER

Mr. HAWLEY (for himself, Mr. DAINES, Mr. BRAUN, Mr. SCOTT of Florida, Mr. TILLIS, Mrs. LOEFFLER, Mr. CRAMER, Mr. SASSE, Ms. ERNST, Mr. LEE, Mr. CRUZ, Mr. PERDUE, Mr. SCOTT of South Carolina, Mr. INHOFE, and Ms. McSALLY) submitted the following resolution; which was referred to the Select Committee on Ethics:

S. RES. 532

Whereas the Senator from New York, Mr. Schumer, is the Leader of the Democratic Caucus and a former member of the Committee on the Judiciary of the Senate;

Whereas, at a protest at the Supreme Court of the United States on March 4, 2020, Senator Schumer inveighed against 2 Associate Justices of the Supreme Court of the United States by saying, "I want to tell you, Gorsuch, I want to tell you, Kavanaugh, you have release the whirlwind, and you will pay the price.";

Whereas Senator Schumer went on to warn Justice Gorsuch and Justice Kavanaugh, "You won't know what hit you if you go forward with these awful decisions.";

Whereas the statements of Senator Schumer are an attempt to unduly influence the judicial decisions of the Supreme Court of the United States and to undermine the vision of the founders of the United States of the "complete independence of the courts of justice", as Alexander Hamilton wrote in Federalist No. 78;

Whereas the statements of Senator Schumer could be read to suggest a threat or call for physical violence against 2 Associate Justices of the Supreme Court of the United States;

Whereas the Chief Justice of the United States immediately rebuked Senator Schumer, stating that "threatening statements of this sort from the highest levels of government are not only inappropriate, they are dangerous";

Whereas, according to the Institute for Economics and Peace, political violence in the United States has increased over the last decade;

Whereas, in 2018, the United States Marshals Service investigated 4,542 threats and inappropriate communications against the judiciary:

Whereas 4 Federal judges have been targeted and murdered since 1979 and 2 family members of another Federal judge have been murdered; and

Whereas Senator Schumer has acknowledged that threatening statements can increase the dangers of violence against government officials when he stated on June 15, 2017, following the attempted murder of several elected Members of Congress, "We would all be wise to reflect on the importance of civility in our [N]ation's politics" and that "the level of nastiness, vitriol, and hate that has seeped into our politics must be excised": Now, therefore, be it

Resolved, That the Senate-

- (1) censures and condemns in the strongest possible terms the Senator from New York, Mr. Schumer, for his threatening statements against Associate Justice Neil M. Gorsuch and Associate Justice Brett M. Kavanaugh; and
- (2) calls on all members of the Senate to respect the independence of the Federal judiciary.

SENATE RESOLUTION 533—SUP-PORTING THE GOALS OF INTER-NATIONAL WOMEN'S DAY

Mrs. SHAHEEN (for herself, Ms. COL-LINS, Mr. MURPHY, and Ms. BALDWIN) submitted the following resolution; which was referred to the Committee on Foreign Relations:

S. RES. 533

Whereas, as of March 2020, there are approximately 3,764,000,000 women and girls in the world:

Whereas women and girls around the world— $\,$

- (1) have fundamental human rights:
- (2) play a critical role in providing and caring for their families and driving positive change in their communities;
- (3) contribute substantially to food security, economic growth, the prevention and resolution of conflict, and the sustainability of peace and stability; and
- (4) must have meaningful opportunities to more fully participate in and lead the political, social, and economic lives of their communities:

Whereas the advancement and empowerment of women and girls around the world is a foreign policy priority for the United States and is critical to the achievement of global peace and prosperity;

Whereas 2020 marks the anniversary of significant milestones toward advancing the human rights and equality of women and girls, including—

- (1) the 100th anniversary of women's suffrage in the United States; and
- (2) the 20th anniversary of the Women, Peace, and Security Agenda, which was established through the unanimous adoption of United Nations Security Council Resolution 1325 in October 2000:

Whereas the National Security Strategy of the United States, published in December 2017—

- (1) declares that "[s]ocieties that empower women to participate fully in civic and economic life are more prosperous and peace-ful".
- (2) supports "efforts to advance women's equality, protect the rights of women and girls, and promote women and youth empowerment programs"; and
- (3) recognizes that "governments that fail to treat women equally do not allow their societies to reach their potential";

Whereas, on October 6, 2017, the Women, Peace, and Security Act of 2017 (22 U.S.C. 2152) et seq.) was enacted into law, which includes requirements for a government-wide "Women, Peace, and Security Strategy" to promote and strengthen the participation of women in peace negotiations and conflict

prevention overseas, enhanced training for relevant United States Government personnel, and follow-up evaluations of the effectiveness of the strategy;

Whereas the United States Strategy on Women, Peace, and Security, dated June 2019, recognizes that—

- (1) the "[s]ocial and political marginalization of women strongly correlates with the likelihood that a country will experience conflict";
- (2) there is a "tremendous amount of untapped potential among the world's women and girls to identify, recommend, and implement effective solutions to conflict", and there are "benefits derived from creating opportunities for women and girls to serve as agents of peace via political, economic, and social empowerment"; and
- (3) barriers to the meaningful participation of women and girls in conflict prevention and resolution efforts "include under-representation in political leadership, pervasive violence against women and girls, and persistent inequality in many societies";

Whereas, according to the United Nations Entity for Gender Equality and the Empowerment of Women (commonly referred to as "UN Women"), peace negotiations are more likely to end in a peace agreement when women and women's groups play a meaningful role in the negotiation process;

Whereas, according to a study by the International Peace Institute, a peace agreement is 35 percent more likely to last at least 15 years if women participate in the development of the peace agreement;

Whereas there are 83 national action plans relating to the empowerment of women around the world, 11 regional action plans, and at least 9 additional national action plans in development;

Whereas the joint strategy of the Department of State and the United States Agency for International Development (USAID) entitled "Department of State & USAID Joint Strategy on Countering Violent Extremism" and dated May 2016—

(1) notes that women can play a critical role in identifying and addressing drivers of violent extremism in their families, communities, and broader society; and

(2) commits to supporting programs that engage women "as key stakeholders in preventing and countering violent extremism in their communities":

Whereas, according to the Bureau of International Narcotics and Law Enforcement Affairs of the Department of State, the full and meaningful participation of women in criminal justice professions and security forces vastly enhances the effectiveness of the security forces:

Whereas, despite the contributions of women to society, hundreds of millions of women and girls around the world continue to be denied the right to participate freely in civic and economic life, lack fundamental legal protections, and remain vulnerable to exploitation and abuse;

Whereas, every year, approximately 12,000,000 girls are married before they reach the age of 18, which means that—

- (1) nearly 33,000 girls are married every day; or
- (2) nearly 23 girls are married every minute;

Whereas, despite global progress, it is predicted that by 2030 more than 150,000,000 more girls will marry before reaching the age of 18, and approximately 2,400,000 girls who are married before reaching the age of 18 are under the age of 15;

Whereas girls living in countries affected by conflict or other humanitarian crises are often the most vulnerable to child marriage, and 9 of the 10 countries with the highest rates of child marriage are considered fragile or extremely fragile; Whereas, according to the International Labour Organization, 71 percent of the estimated 40,300,000 victims of modern slavery in 2016 were women or girls:

Whereas, according to the United Nation's Children's Fund (commonly referred to as "UNICEF")—

- (1) approximately ½ of girls between the ages of 15 and 19 are victims of physical violence;
- (2) approximately 120,000,000 girls worldwide, slightly more than 1 in 10, have experienced forced sexual acts; and
- (3) an estimated 1 in 3 women around the world has experienced some form of physical or sexual violence:

Whereas, according to the 2018 report of the United Nations Office on Drugs and Crime entitled "Global Report on Trafficking in Persons", 72 percent of all detected trafficking victims are women or girls:

Whereas, on August 10, 2012, the United States Government launched a strategy entitled "United States Strategy to Prevent and Respond to Gender-Based Violence Globally", which is the first interagency strategy that—

- (1) addresses gender-based violence around the world;
- (2) advances the rights and status of women and girls;
- (3) promotes gender equality in United States foreign policy; and
- (4) works to bring about a world in which all individuals can pursue their aspirations without the threat of violence:

Whereas, in June 2016, the Department of State released an update to that strategy, underscoring that "[p]reventing and responding to gender-based violence is a cornerstone of the U.S. Government's commitment to advancing human rights and promoting gender equality and the empowerment of women and girls";

Whereas, despite the achievements of individual female leaders and evidence that democracy and equality under the law form a mutually reinforcing relationship in which higher levels of equality are strongly correlated with the relative state of peace of a country, a healthier domestic security environment, and lower levels of aggression toward other countries—

- (1) women around the world remain vastly underrepresented in—
- (A) national and local legislatures and governments; and
- (B) other high-level positions; and
- (2) according to the Inter-Parliamentary Union, women account for only 25 percent of national parliamentarians and 21 percent of government ministers:

Whereas the ability of women and girls to realize their full potential is critical to the ability of a country to achieve strong and lasting economic growth, self-reliance, and political and social stability;

Whereas the overall level of violence against women is a better predictor of the peacefulness of a country, the compliance of a country with international treaty obligations, and the relations of a country with neighboring countries than indicators measuring the level of democracy, level of wealth, or level of institutionalization of the country;

Whereas, although the United Nations Millennium Project reached the goal of achieving gender parity in primary education in most countries in 2015, more work remains to be done to achieve gender equality in primary and secondary education, and particularly in secondary education worldwide as gender gaps persist and widen, by addressing—

- (1) discriminatory practices;
- (2) harmful cultural and social norms;

- (3) inadequate sanitation facilities, including facilities to manage menstruation;
 - (4) child, early, and forced marriage;
 - (5) poverty;
 - (6) early pregnancy and motherhood;
- (7) conflict and insecurity; and
- (8) other factors that favor boys or devalue girls' education;

Whereas, according to the United Nations Educational, Scientific and Cultural Organization—

- (1) approximately 129,200,000 girls between the ages of 6 and 17 remain out of school;
- (2) girls living in countries affected by conflict are 2.5 times more likely to be out of school than boys:
- (3) girls are twice as likely as boys to never set foot in a classroom; and
- (4) up to 30 percent of girls who drop out of school do so because of adolescent pregnancy or child marriage:

Whereas women around the world face a variety of constraints that severely limit their economic participation and productivity and remain underrepresented in the labor force:

Whereas the economic empowerment of women is inextricably linked to a myriad of other human rights that are essential to the ability of women to thrive as economic actors, including—

- (1) living lives free of violence and exploitation:
- (2) achieving the highest possible standard of health and well-being:
- (3) enjoying full legal and human rights, such as access to registration, identification, and citizenship documents, and freedom of movement:
- (4) access to formal and informal education;
- (5) access to, and equal protection under, land and property rights;
 - (6) access to fundamental labor rights;
- (7) the implementation of policies to address disproportionate care burdens; and
- (8) receiving business and management skills and leadership opportunities;

Whereas closing the global gender gap in labor markets could increase worldwide gross domestic product by as much as \$28,000,000,000,000 by 2025;

Whereas, pursuant to section 3(b) of the Women's Entrepreneurship and Economic Empowerment Act of 2018 (22 U.S.C. 2151–2(b)), it is the international development cooperation policy of the United States—

- (1) to reduce gender disparities with respect to economic, social, political, educational, and cultural resources, as well as wealth, opportunities, and services;
- (2) to strive to eliminate gender-based violence and mitigate its harmful effects on individuals and communities, including through efforts to develop standards and capacity to reduce gender-based violence in the workplace and other places where women work:
- (3) to support activities that secure private property rights and land tenure for women in developing countries, including—
- (A) supporting legal frameworks that give women equal rights to own, register, use, profit from, and inherit land and property:
- (B) improving legal literacy to enable women to exercise the rights described in subparagraph (A); and
- (C) improving the capacity of law enforcement and community leaders to enforce such rights;
- (4) to increase the capability of women and girls to fully exercise their rights, determine their life outcomes, assume leadership roles, and influence decision making in households, communities, and societies; and
- (5) to improve the access of women and girls to education, particularly higher edu-

cation opportunities in business, finance, and management, in order to enhance financial literacy and business development, management, and strategy skills;

Whereas, pursuant to National Security Presidential Memorandum 16, entitled "Promoting Women's Global Development and Prosperity", "It is the policy of the United States to enhance the opportunity for women to meaningfully participate in, contribute to, and benefit from economic opportunities as individuals, workers, consumers, innovators, entrepreneurs, and investors, so that they enjoy the same access, rights, and opportunities as men to participate in, contribute to, control, and benefit from economic activity.";

Whereas, according to the World Health Organization, global maternal mortality decreased by approximately 44 percent between 1990 and 2015, yet approximately 830 women and girls continue to die from preventable causes relating to pregnancy or childbirth each day, and 99 percent of all maternal deaths occur in developing countries;

Whereas, according to the United Nations Population Fund, of the 830 women and adolescent girls who die every day from preventable causes relating to pregnancy and child-birth, 507 die each day in countries that are considered fragile because of conflict or disaster, accounting for approximately 3% of all maternal deaths worldwide;

Whereas the Office of the United Nations High Commissioner for Refugees reports that women and girls comprise approximately ½ of the 67,200,000 refugees and internally displaced or stateless individuals in the world;

Whereas women and girls in humanitarian emergencies, including those subject to forced displacement, face increased and exactionable displacement with the contract of the con

- (1) gender-based violence, including, rape, child marriage, domestic violence, human trafficking, and sexual exploitation and assault:
- (2) disruptions in education and livelihood; (3) lack of access to comprehensive health services and information; and
 - (4) food insecurity and malnutrition;

Whereas malnutrition poses a variety of threats to women and girls specifically, as malnutrition can weaken their immune systems, making them more susceptible to infections, and affects their capacity to survive childbirth, and children born of malnourished women and girls are more likely to have cognitive impairments and higher risk of disease throughout their lives:

Whereas it is imperative—

(1) to alleviate violence and discrimination against women and girls; and

(2) to afford women and girls every opportunity to be full and productive members of their communities; and

Whereas March 8, 2020, is recognized as International Women's Day, a global day—

- (1) to celebrate the economic, political, and social achievements of women in the past, present, and future; and
- (2) to recognize the obstacles that women face in the struggle for equal rights and opportunities: Now, therefore, be it

Resolved, That the Senate—

- (1) supports the goals of International Women's Day;
- (2) recognizes that the ability of women and girls to fully access and enjoy fundamental human rights has intrinsic value that affects their quality of life and ability to determine their own futures;
- (3) recognizes that the empowerment of women and girls is inextricably linked to the potential of a country to generate—
- (A) economic growth and self-reliance;
- (B) sustainable peace and democracy; and
- (C) inclusive security;
- (4) recognizes and honors individuals in the United States and around the world, includ-

ing women human rights defenders, girl activists, and civil society leaders, who have worked throughout history to ensure that women and girls are guaranteed equality and fundamental human rights;

(5) recognizes the unique cultural, historical, and religious differences throughout the world and urges the United States Government to act with respect and understanding toward legitimate differences when promoting any policies;

(6) reaffirms the commitment—

- (A) to end discrimination and violence against women and girls;
- (B) to ensure the safety, health, and welfare of women and girls;
- (C) to pursue policies that guarantee the fundamental human rights of women and girls worldwide; and
- (D) to promote meaningful and significant participation of women in every aspect of society and community, including conflict prevention, protection, peacemaking, and peacebuilding;
- (7) supports sustainable, measurable, and global development that seeks to achieve gender equality and the empowerment of women and girls; and
- (8) encourages the people of the United States to observe International Women's Day with appropriate programs and activities.

SENATE RESOLUTION 534—DESIGNATING MARCH 2 THROUGH MARCH 8, 2020, AS "WOMEN OF THE AVIATION WORKFORCE WEEK"

Ms. ROSEN (for herself and Mr. MORAN) submitted the following resolution; which was referred to the Committee on the Judiciary:

S. RES. 534

Whereas the first week of March is internationally known as "Women of Aviation Worldwide Week":

Whereas Women of Aviation Worldwide Week was created by the Institute for Women Of Aviation Worldwide;

Whereas, over the last 5 years, the aviation industry has experienced an increase in passenger traffic by an average of 6.5 percent per year:

Whereas the aviation industry is anticipating a significant shortage of skilled professionals in the coming years;

Whereas the Bureau of Labor Statistics of the Department of Labor projected that, in the next 10 years, the overall employment of airline and commercial pilots is expected to grow more than 6 percent in the United States;

Whereas less than 2 percent of the aircraft maintenance technicians in the world and less than 10 percent of all working aeronautical engineers are women;

Whereas the Federal Aviation Administration reports that less than 8 percent of pilots and only 26 percent of air traffic controllers in the United States are women;

Whereas women make up only 24 percent of the employees in the aerospace industry;

Whereas aviation is a science, technology, engineering, and math (commonly known as "STEM") focused career path;

Whereas the future of an abundant aviation workforce depends on a robust and diverse pool of candidates; and

Whereas women such as Amelia Earhart, Cicely Williams, Nicole Malachowski, Bessie Coleman, and Jeannie Leavitt have inspired, and will continue to inspire, young women to pursue careers in aviation: Now, therefore, be it.

Resolved, That the Senate—

- (1) designates March 2 through March 8, 2020, as "Women of the Aviation Workforce Week":
- (2) celebrates the aviation workforce of the United States;
- (3) encourages educational and training institutions to recruit women to join the aviation workforce:
- (4) encourages employers in the aviation industry to hire a diverse workforce, including women, veterans, and other underrepresented individuals; and
 - (5) commits to-
- (A) raising awareness about the gender gap in the air and space industry; and
- (B) taking legislative actions to address the gender gap in science, technology, engineering, and math (commonly known as "STEM") fields.

SENATE RESOLUTION 535—DESIGNATING MARCH 5, 2020, AS "NATIONAL SLAM THE SCAM" DAY" TO RAISE AWARENESS ABOUT THE INCREASING NUMBER OF GOVERNMENT IMPOSTER SCAMS, TO ENCOURAGE THE IMPLEMENTATION OF POLICIES TO PREVENT GOVERNMENT IMPOSTER SCAMS, AND TO ENCOURAGE THE IMPROVEMENT OF PROTECTIONS FROM GOVERNMENT IMPOSTER SCAMS FOR THE PEOPLE OF THE UNITED STATES

Ms. COLLINS (for herself, Ms. SINEMA, Ms. McSALLY, and Mr. CASEY) submitted the following resolution; which was considered and agreed to:

S. RES. 535

Whereas millions of individuals in the United States are targeted by scams each year, including government imposter scams, such as the Social Security impersonation scam and the Internal Revenue Service impersonation scam, sweepstakes scams, romance scams, computer tech support scams, grandparent scams, debt scams, home improvement scams, fraudulent investment schemes, and identity theft;

Whereas, since 2013, the fraud hotline of the Special Committee on Aging of the Senate has received more than 9,500 complaints from individuals in all 50 States, the District of Columbia, and the Commonwealth of Puerto Rico reporting possible scams;

Whereas government imposter scams involve criminals contacting individuals in the United States and impersonating employees of government agencies, such as the Social Security Administration, to demand payment or personal information, which defrauds individuals of the United States and erodes trust in the government agencies that the criminals impersonate;

Whereas, since 2014, fraud from government imposter scams has been the top fraud type reported to the Federal Trade Commission;

Whereas there were nearly 390,000 government imposter scams reported to the Federal Trade Commission in 2019;

Whereas the Federal Trade Commission has estimated that victims lost nearly \$153,000,000 to government imposter scams in 2019:

Whereas, according to the Federal Trade Commission, in 2018, older adults reported larger median individual losses as a result of government imposter scams than younger adults;

Whereas, in 2019, the fraud hotline of the Special Committee on Aging of the Senate received more than 5 times the number of

Social Security impersonation scam complaints than that hotline received in 2018;

Whereas, according to the Federal Trade Commission—

- (1) individuals in the United States reported losing nearly \$38,000,000 to the Social Security impersonation scam in 2019; and
- (2) in 2018, the Social Security impersonation scam contributed to an increase from 2017 in median financial losses reported by older individuals of the United States; and

Whereas increased awareness of, and education about, government imposter scams help to thwart government imposter scammers: Now, therefore, be it

Resolved, That the Senate-

- (1) designates March 5, 2020, as "National 'Slam the Scam' Day";
- (2) recognizes National "Slam the Scam" Day as an opportunity to raise awareness about scams that involve individuals impersonating government employees by mail, on the phone, or online (referred to in this resolving clause as "government imposter scams");
- (3) recognizes that law enforcement agencies, consumer protection groups, area agencies on aging, and financial institutions all play vital roles in—
- (A) preventing government imposter scams from targeting the people of the United States; and
- (B) educating the people of the United States about government imposter scams;
- (4) encourages-
- (A) the implementation of policies to prevent government imposter scams; and
- (B) the improvement of measures to protect the people of the United States from government imposter scams;
- (5) encourages members of the public to—
- (A) hang up on calls from individuals falsely claiming to represent government agencies:
- (B) share information about government imposter scams with family and friends; and
- (C) report government imposter scams to—
 (i) the Inspector General of the Social Se-
- curity Administration;
 (ii) the Treasury Inspector General for Tax
 Administration; or
- (iii) the Federal Trade Commission; and
- (6) honors the commitment and dedication of the individuals and organizations who work tirelessly to fight against government imposter scams.

Mrs. COLLINS. Mr. President, I rise to recognize today, March 5, as National "Slam the Scam" Day. I first want to thank my colleague from Arizona, Senator Sinema, for working with me on a Senate resolution designating today as National "Slam the Scam" Day. This resolution will help raise awareness of Government imposter scams with a single message: hang up and tell someone.

In Government imposter scams, criminals claim to be from Government agencies, such as the Social Security Administration, and call Americans demanding payment or personal information.

These scams look real because they often begin with an unsolicited robocall using a spoofed caller ID, showing the name of the Government agency they are pretending to be. In reality, the Government would never call to threaten you or demand payment using gift cards, cash, wire transfers, or internet cryptocurrency.

Government imposter scams have been the number one complaint reported to the Aging Committee's Fraud Hotline since its creation in 2013. Over the last two years, nearly 2,000 Maine consumers reported Government imposter scams to the Federal Trade Commission, with total losses of more than \$700,000.

Last year, the top reported scam to the Fraud Hotline, which the Aging Committee featured in our first hearing of the year, was the Social Security Administration impersonation scam. Americans reported losing nearly \$38 million to this scam in 2019 alone, according to the Federal Trade Commission. That undoubtedly is the tip of the iceberg.

Scammers are ruthlessly targeting Americans, and particularly older Americans, across the country. In 2016, Philip Hatch, an 81-year Navy veteran from Maine, lost \$8,000 of his hard-earned savings to a Government impersonation scam. These scammers first posed as IRS agents and then impersonated the Portland Police Department.

Just last year, a Maine senior reported a call from someone claiming to work for the Social Security Administration. The caller told him that his Social Security number matched a credit card used to rent a car found on the Texas border filled with drugs and blood. The caller provided an FBI ID number and correctly identified when my constituent had recently visited Texas on business. When prompted by the scammer, he confirmed his date of birth and Social Security number.

These pernicious scams not only steal the savings of hardworking Americans and threaten to compromise their personal information; they also erode public trust and make it more difficult for Federal, State, and local government agencies to fulfill their missions.

The Aging Committee, which I chair, has held 25 hearings on scams over the past seven years, and we have examined Government imposter scams from a number of angles. Public awareness can help to stop these scams from the start.

I urge my colleagues to join me in marking today as National "Slam the Scam" Day by supporting our resolution. Let's work together to hang up on these Government imposters and put them out of business once and for all. Let's slam these scams.

AMENDMENTS SUBMITTED AND PROPOSED

SA 1514. Mr. PORTMAN (for himself and Mrs. Shaheen) proposed an amendment to amendment SA 1407 proposed by Ms. Murkowski to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes.

SA 1515. Mr. DURBIN submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1516. Mr. BROWN submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Murkowski to the

bill S. 2657, supra; which was ordered to lie

on the table. SA 1517. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Mur-KOWSKI to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1518. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Mur-KOWSKI to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1519. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Mur-KOWSKI to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1520. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Mur-KOWSKI to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1521. Mrs. HYDE-SMITH submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Mur-KOWSKI to the bill S. 2657, supra; which was ordered to lie on the table.

SA 1522. Mr. McCONNELL (for Mr. ALEX-ANDER) proposed an amendment to the bill S. 2683, to establish a task force to assist States in implementing hiring requirements for child care staff members to improve child

SA 1523. Mr. McCONNELL (for Mr. BLUNT) proposed an amendment to the bill S. 2321, to require the Secretary of the Treasury to mint a coin in commemoration of the 100th anniversary of the establishment of Negro Leagues baseball.

SA 1524. Mr. McCONNELL (for Ms. ERNST) proposed an amendment to the bill S. 1757, to award a Congressional Gold Medal, collectively, to the United States Army Rangers Veterans of World War II in recognition of their extraordinary service during World War II.

SA 1525. Mrs. SHAHEEN submitted an amendment intended to be proposed to amendment SA 1514 proposed by Mr. PORTMAN (for himself and Mrs. Shaheen) to the amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table.

TEXT OF AMENDMENTS

SA 1514. Mr. PORTMAN (for himself and Mrs. Shaheen) proposed an amendment to amendment SA 1407 proposed by Ms. Murkowski to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; as follows:

At the end of chapter 1 of subpart A of part I of subtitle A of title I, add the following: . GREATER ENERGY EFFICIENCY IN SEC. 10 BUILDING CODES.

(a) Definitions.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) (as amended by section 1034(a)) is

- amended-
- (1) by striking paragraph (17) (as redesignated by that section) and inserting the following:
- "(17) Model building energy code.—The term 'model building energy code' means a voluntary building energy code or standard developed and updated by interested persons, such as the code or standard developed by-
- "(A) the Council of American Building Officials, or its legal successor, International Code Council, Inc.;
- "(B) the American Society of Heating, Refrigerating, and Air-Conditioning Engineers;

- "(C) other appropriate organizations.";
- (2) by redesignating paragraphs through (17) (as amended by that section) as paragraphs (13) through (19), respectively; and
- (3) by inserting after paragraph (10) (as redesignated by that section) the following:
- "(11) IECC.—The term 'IECC' means the International Energy Conservation Code.
- "(12) Indian Tribe.—The term 'Indian tribe' has the meaning given the term in section 4 of the Native American Housing Assistance and Self-Determination Act of 1996 (25 U.S.C. 4103).
- (b) STATE BUILDING ENERGY EFFICIENCY CODES.—Section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) is amended to read as follows:

"SEC. 304. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.

- "(a) ACTION BY SECRETARY.—The Secretary shall-
- "(1) encourage and support the adoption of building energy codes by States, Indian tribes, and, as appropriate, by local governments that meet or exceed the model building energy codes, or achieve equivalent or greater energy savings; and
- "(2) support full compliance with the State and local codes.
- "(b) STATE AND INDIAN TRIBE CERTIFI-CATION OF BUILDING ENERGY CODE UPDATES.
- "(1) REVIEW AND UPDATING OF CODES BY EACH STATE AND INDIAN TRIBE.-
- "(A) IN GENERAL.—Not later than 2 years after the date of publication of a revision to a model building energy code, each State or Indian tribe shall certify whether the State or Indian tribe, respectively, has reviewed and updated the energy provisions of the building code of the State or Indian tribe, respectively.
- "(B) DEMONSTRATION.—The certification shall include a demonstration of whether the energy savings for the code provisions that are in effect throughout the territory of the State or Indian tribe meet or exceed the energy savings of the updated model building energy code.
- "(C) NO MODEL BUILDING ENERGY CODE UP-DATE.—If a model building energy code is not undated by a target date established under section 307(b)(2)(E), each State or Indian tribe shall, not later than 2 years after the specified date, certify whether the State or Indian tribe, respectively, has reviewed and updated the energy provisions of the building code of the State or Indian tribe, respectively, to meet or exceed the target in section 307(b)(2).
- "(2) Validation by secretary.—Not later than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall-
- "(A) determine whether the code provisions of the State or Indian tribe, respectively, meet the criteria specified in paragraph (1); and
- "(B) if the determination is positive, validate the certification.
- "(c) IMPROVEMENTS IN COMPLIANCE WITH BUILDING ENERGY CODES.—
- "(1) REQUIREMENT.-
- "(A) IN GENERAL.—Not later than 3 years after the date of a certification under subsection (b), each State and Indian tribe shall certify whether the State and Indian tribe, respectively, has-
- "(i) achieved full compliance under paragraph (3) with the applicable certified State and Indian tribe building energy code or with the associated model building energy code;
- "(ii) made significant progress under paragraph (4) toward achieving compliance with the applicable certified State and Indian tribe building energy code or with the associated model building energy code.

- "(B) REPEAT CERTIFICATIONS.—If the State or Indian tribe certifies progress toward achieving compliance, the State or Indian tribe shall repeat the certification until the State or Indian tribe certifies that the State or Indian tribe has achieved full compliance, respectively.
- "(2) MEASUREMENT OF COMPLIANCE.—A certification under paragraph (1) shall include documentation of the rate of compliance based on-
- "(A) independent inspections of a random sample of the buildings covered by the code in the preceding year; or
- "(B) an alternative method that yields an accurate measure of compliance.
- "(3) ACHIEVEMENT OF COMPLIANCE.—A State or Indian tribe shall be considered to achieve full compliance under paragraph (1) if-
- "(A) at least 90 percent of building space covered by the code in the preceding year substantially meets all the requirements of the applicable code specified in paragraph (1), or achieves equivalent or greater energy savings level; or
- "(B) the estimated excess energy use of buildings that did not meet the applicable code specified in paragraph (1) in the preceding year, compared to a baseline of comparable buildings that meet this code, is not more than 5 percent of the estimated energy use of all buildings covered by this code during the preceding year.
- "(4) SIGNIFICANT PROGRESS TOWARD ACHIEVEMENT OF COMPLIANCE —A State or Indian tribe shall be considered to have made significant progress toward achieving compliance for purposes of paragraph (1) if the State or Indian tribe-
- "(A) has developed and is implementing a plan for achieving compliance during the 8year-period beginning on the date of enactment of the American Energy Innovation Act of 2020, including annual targets for compliance and active training and enforcement programs; and
- "(B) has met the most recent target under subparagraph (A).
- "(5) Validation by secretary.—Not later than 90 days after a State or Indian tribe certification under paragraph (1), the Secretary shall—
- "(A) determine whether the State or Indian tribe has demonstrated meeting the criteria of this subsection, including accurate measurement of compliance; and
- "(B) if the determination is positive, validate the certification.
- '(d) STATES OR INDIAN TRIBES THAT DO NOT ACHIEVE COMPLIANCE.—
- (1) REPORTING.—A State or Indian tribe that has not made a certification required under subsection (b) or (c) by the applicable deadline shall submit to the Secretary a report describing-
- "(A) the status of the State or Indian tribe with respect to meeting the requirements and submitting the certification; and
- "(B) a plan for meeting the requirements and submitting the certification.
- "(2) FEDERAL SUPPORT.—For any State or Indian tribe for which the Secretary has not validated a certification by a deadline under subsection (b) or (c), the lack of the certification may be a consideration for Federal support authorized under this section for code adoption and compliance activities.
- "(3) LOCAL GOVERNMENT.—In any State or Indian tribe for which the Secretary has not validated a certification under subsection (b) or (c), a local government may be eligible for Federal support under subsections (e) and (f) by meeting the certification requirements of subsections (b) and (c).
 - "(4) REPORTS BY SECRETARY.-
- "(A) IN GENERAL.-Not later than December 31, 2021, and not less frequently than once every 3 years thereafter, the Secretary shall

- submit to Congress and publish a report describing—
- "(i) the status of model building energy codes;
- "(ii) the status of code adoption and compliance in the States and Indian tribes;
- "(iii) implementation of this section; and
- "(iv) improvements in energy savings over time as result of the targets established under section 307(b)(2).
- "(B) IMPACTS.—The report shall include estimates of impacts of past action under this section, and potential impacts of further action, on—
- "(i) upfront financial and construction costs, cost benefits and returns (using investment analysis), and lifetime energy use for buildings:
- "(ii) resulting energy costs to individuals and businesses: and
- "(iii) resulting overall annual building ownership and operating costs.
- "(e) Technical Assistance to States and Indian tribes to implement the goals and requirements of this section, including procedures and technical analysis for States and Indian tribes—
- "(1) to improve and implement State residential and commercial building energy codes;
- "(2) to demonstrate that the code provisions of the States and Indian tribes achieve equivalent or greater energy savings than the model building energy codes and targets;
- "(3) to document the rate of compliance with a building energy code; and
- "(4) to otherwise promote the design and construction of energy- and water-efficient buildings.
- "(f) AVAILABILITY OF INCENTIVE FUNDING.—
- "(1) IN GENERAL.—The Secretary shall provide incentive funding to States and Indian tribes—
- $\mbox{``(A)}$ to implement the requirements of this section;
- "(B) to improve and implement residential and commercial building energy codes, including increasing and verifying compliance with the codes and training of State, tribal, and local building code officials to implement and enforce the codes; and
- "(C) to promote building energy and water efficiency through the use of the codes and standards.
- "(2) ADDITIONAL FUNDING.—Additional funding shall be provided under this subsection for implementation of a plan to achieve and document full compliance with residential and commercial building energy codes under subsection (c)—
- "(A) to a State or Indian tribe for which the Secretary has validated a certification under subsection (b) or (c); and
- "(B) in a State or Indian tribe that is not eligible under subparagraph (A), to a local government that is eligible under this section.
- "(3) TRAINING.—Of the amounts made available under this subsection, the State or Indian tribe may use amounts required, but not to exceed \$750,000 for a State, to train State and local building code officials to implement and enforce codes described in paragraph (2).
- "(4) LOCAL GOVERNMENTS.—States may share grants under this subsection with local governments that implement and enforce the codes.
- ''(g) STRETCH CODES AND ADVANCED STANDARDS.—
- "(1) IN GENERAL.—The Secretary shall provide technical and financial support for the development of stretch codes and advanced standards for residential and commercial buildings for use as—

- "(A) an option for adoption as a building energy code by local, tribal, or State governments: and
- "(B) guidelines for energy-efficient building design.
- "(2) TARGETS.—The stretch codes and advanced standards shall be designed—
- "(A) to achieve substantial energy savings compared to the model building energy codes; and
- "(B) to meet targets under section 307(b), if available, at least 3 to 6 years in advance of the target years.
- "(h) STUDIES.—The Secretary, in consultation with building science experts from the National Laboratories and institutions of higher education, designers and builders of energy-efficient residential and commercial buildings, code officials, code and standards developers, and other stakeholders, shall undertake a study of the feasibility, impact, economics, and merit of—
- "(1) code and standards improvements that would require that buildings be designed, sited, and constructed in a manner that makes the buildings more adaptable in the future to become zero-net-energy after initial construction, as advances are achieved in energy-saving technologies;
- "(2) code procedures to incorporate measured lifetimes, not just first-year energy use, in trade-offs and performance calculations;
- "(3) legislative options for increasing energy savings from building energy codes and standards, including additional incentives for effective State and local action, and verification of compliance with and enforcement of a code or standard other than by a State or local government; and
- "(4) code and standards improvements that consider energy efficiency and water efficiency and, to the maximum extent practicable, consider energy efficiency and water efficiency in an integrated manner.
- "(i) EFFECT ON OTHER LAWS.—Nothing in this section or section 307 supersedes or modifies the application of sections 321 through 346 of the Energy Policy and Conservation Act (42 U.S.C. 6291 et seq.).
 "(j) VOLUNTARY PROVISIONS.—Nothing in
- "(j) VOLUNTARY PROVISIONS.—Nothing in this section shall be binding on a State, local government, or Indian tribe as a matter of Federal law
- "(k) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to carry out this section and section 307 \$200,000,000, to remain available until expended."
- (c) Federal Building Energy Efficiency Standards.—Section 305 of the Energy Conservation and Production Act (42 U.S.C. 6834) is amended by striking "voluntary building energy code" each place it appears in subsections (a)(2)(B) and (b) and inserting "model building energy code".
- (d) Model Building Energy Codes.—Section 307 of the Energy Conservation and Production Act (42 U.S.C. 6836) is amended to read as follows:

"SEC. 307. SUPPORT FOR MODEL BUILDING ENERGY CODES.

- "(a) IN GENERAL.—The Secretary shall support the updating of model building energy codes.
- "(b) TARGETS.—
- "(1) IN GENERAL.—The Secretary shall support the updating of the model building energy codes to enable the achievement of aggregate energy savings targets established under paragraph (2).
 - "(2) TARGETS.-
- "(A) IN GENERAL.—The Secretary shall work with State, Indian tribes, local governments, code and standards developers (such as the entities described in section 303(14)), and other interested parties to support the updating of model building energy codes by establishing one or more national aggregate

- energy savings targets to achieve the purposes of this section.
- "(B) SEPARATE TARGETS.—The Secretary shall establish separate targets for commercial and residential buildings.
- "(C) BASELINES.—The baseline for updating model building energy codes shall be the 2009 IECC for residential buildings and ASHRAE Standard 90.1–2010 for commercial buildings.
- "(D) CODE CYCLES.—The targets established under subparagraph (A) shall align with the respective code development cycles determined by the model building energy codesetting and standards development organizations described in section 303(14).
 - "(E) SPECIFIC YEARS.—
- "(i) IN GENERAL.—Targets for specific years shall be established and revised by the Secretary through rulemaking and coordinated with code and standards developers (such as the entities described in section 303(14)) at a level that—
- "(I) is at the maximum level of energy efficiency that is technologically feasible and lifecycle cost effective, while accounting for the economic considerations under paragraph (4);
- "(II) is higher than the preceding target;
- "(III) promotes the achievement of commercial and residential high-performance buildings (as defined in section 401 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17061)) through high performance energy efficiency; and
- "(IV) takes into consideration the variations in climate zones used in model building energy codes.
- "(ii) INITIAL TARGETS.—Not later than 1 year after the date of enactment of this clause, the Secretary shall establish initial targets under this subparagraph.
- "(iii) DIFFERENT TARGET YEARS.—Subject to clause (i), prior to the applicable year, the Secretary may set a later target year for any of the model building energy codes described in subparagraph (A) if the Secretary determines that a target cannot be met.
- "(iv) SMALL BUSINESS.—When establishing targets under this paragraph through rule-making, the Secretary shall ensure compliance with the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 601 note; Public Law 104–121).
- "(3) APPLIANCE STANDARDS AND OTHER FAC-TORS AFFECTING BUILDING ENERGY USE.—In establishing building code targets under paragraph (2), the Secretary shall develop and adjust the targets in recognition of potential savings and costs relating to—
- "(A) efficiency gains made in appliances, lighting, windows, insulation, and building envelope sealing;
- "(B) advancement of distributed generation and on-site renewable power generation technologies;
- "(C) equipment improvements for heating, cooling, and ventilation systems;
- "(D) building management systems and smart technologies to reduce energy use; and
- "(E) other technologies, practices, and building systems that the Secretary considers appropriate regarding building plug load and other energy uses.
- "(4) ECONOMIC CONSIDERATIONS.—In establishing and revising building code targets under paragraph (2), the Secretary shall consider the economic feasibility of achieving the proposed targets established under this section and the potential costs and savings for consumers and building owners, including a return on investment analysis.
- "(c) TECHNICAL ASSISTANCE TO MODEL BUILDING ENERGY CODE-SETTING AND STANDARDS DEVELOPMENT ORGANIZATIONS.—
- "(1) IN GENERAL.—The Secretary shall, on a timely basis, provide technical assistance to model building energy code-setting and

standards development organizations consistent with the goals of this section.

- "(2) ASSISTANCE.—The assistance shall include, as requested by the organizations, technical assistance in—
- "(A) evaluating code or standards proposals or revisions;
- "(B) building energy and water analysis and design tools;
- "(C) building demonstrations;
- "(D) developing definitions of energy use intensity and building types for use in model building energy codes to evaluate the efficiency impacts of the model building energy codes:
 - "(E) performance-based standards;
- "(F) evaluating economic considerations under subsection (b)(4); and
- "(G) developing model building energy codes by Indian tribes in accordance with tribal law.
- "(3) AMENDMENT PROPOSALS.—The Secretary may submit timely model building energy code amendment proposals to the model building energy code-setting and standards development organizations, with supporting evidence, sufficient to enable the model building energy codes to meet the targets established under subsection (b)(2).
- "(4) ANALYSIS METHODOLOGY.—The Secretary shall make publicly available the entire calculation methodology (including input assumptions and data) used by the Secretary to estimate the energy savings of code or standard proposals and revisions.
 - "(d) DETERMINATION.—
- "(1) REVISION OF MODEL BUILDING ENERGY CODES.—If the provisions of the IECC or ASHRAE Standard 90.1 regarding building energy use are proposed to be revised, the Secretary shall make a preliminary determination, by not later than 90 days after the date of receipt of the proposed revision, and a final determination by not later than 15 months after the date of publication of the revision, regarding whether the revision will—
- "(A) improve energy efficiency in buildings, as compared to the existing model building energy code; and
- "(B) meet the applicable targets under subsection (b)(2).
- "(2) CODES OR STANDARDS NOT MEETING TAR-GETS.—
- "(A) Preliminary determination by secretary.—If the Secretary makes a preliminary determination under paragraph (1)(B) that a code or standard does not meet an applicable target under subsection (b)(2), the Secretary shall contemporaneously provide to the developer of the model building energy code or standard not fewer than 2 proposed changes that would result in a model building energy code that meets the applicable target, together with supporting evidence, taking into consideration—
- "(i) whether the modified code is technically feasible and lifecycle cost effective;
- "(ii) available appliances, technologies, materials, and construction practices; and
- "(iii) the economic considerations under subsection (b)(4)
- "(B) DETERMINATION OR ELECTION BY DEVEL-OPER.—Not later than 270 days after the date of receipt of proposed changes of the Secretary under subparagraph (A), a developer
 - "(i) determine whether—
- "(I) to publish a new revised code accepting the proposed changes; or
- "(II) to reject the proposed changes; or
- "(ii) if the developer elects not to make a determination under clause (i), publish a notice of that election, together with the proposed changes.
- "(C) FINAL DETERMINATION BY SECRETARY.—
- "(i) IN GENERAL.—A final determination by the Secretary shall be made on the model

building energy code or standard, as modified by the changes proposed by the Secretary under subparagraph (A).

- "(ii) ADDITIONAL DETERMINATIONS.—If a model building energy code or standards developer makes an election pursuant to subparagraph (B)(ii), the Secretary shall make the following final determinations for purposes of this subsection:
- "(I) A final determination regarding whether the code or standard of the developer, absent any changes proposed by the Secretary under subparagraph (A), will—
- "(aa) improve energy efficiency in buildings, as compared to the existing model building energy code; and
- "(bb) meet the applicable targets under subsection (b)(2).
- "(II) A final determination regarding whether the code or standard of the developer, as modified by the changes proposed by the Secretary under subparagraph (A), would—
- "(aa) improve energy efficiency in buildings, as compared to the existing model building energy code; and
- "(bb) meet the applicable targets under subsection (b)(2).
- "(e) ADMINISTRATION.—In carrying out this section, the Secretary shall—
- "(1) publish notice of targets and supporting analysis and determinations under this section in the Federal Register to provide an explanation of and the basis for such actions, including any supporting modeling, data, assumptions, protocols, and cost-benefit analysis, including return on investment: and
- "(2) provide an opportunity for public comment on targets and supporting analysis and determinations under this section."

SEC. 10____. COST-EFFECTIVE CODES IMPLEMENTATION FOR EFFICIENCY AND RESILIENCE.

(a) IN GENERAL.—Title III of the Energy Conservation and Production Act (42 U.S.C. 6831 et seq.) is amended by adding at the end the following:

"SEC. 309. COST-EFFECTIVE CODES IMPLEMENTA-TION FOR EFFICIENCY AND RESIL-IENCE.

- ``(a) Definitions.—In this section:
- $\lq\lq(1)$ ELIGIBLE ENTITY.—The term 'eligible entity' means—
- "(A) a relevant State agency, as determined by the Secretary, such as a State building code agency or State energy office; and
- "(B) a partnership.
- "(2) PARTNERSHIP.—The term 'partnership' means a partnership between an eligible entity described in paragraph (1)(A) and one or more of the following entities:
 - "(A) Local building code agencies.
- "(B) Codes and standards developers.
- "(C) Associations of builders and design and construction professionals.
- "(D) Local and utility energy efficiency programs.
- "(E) Consumer, energy efficiency, and environmental advocates.
- ``(F) Other entities, as determined by the Secretary.
- "(3) SECRETARY.—The term 'Secretary' means the Secretary of Energy.
- "(b) ESTABLISHMENT.—
- "(1) IN GENERAL.—The Secretary shall establish within the Building Technologies Office of the Department of Energy a program under which the Secretary shall award grants on a competitive basis to eligible entities to enable sustained cost-effective implementation of updated building energy codes.
- "(2) UPDATED BUILDING ENERGY CODE.—An update to a building energy code under this section shall include any update made available after the existing building energy code,

- even if it is not the most recent updated code available.
- "(c) CRITERIA; PRIORITY.—In awarding grants under subsection (b), the Secretary shall—
 - "(1) consider—
- "(A) prospective energy savings and plans to measure the savings:
- "(B) the long-term sustainability of those measures and savings;
- "(C) prospective benefits, and plans to assess the benefits, including benefits relating to—
 - "(i) resilience and peak load reduction;
 - "(ii) occupant safety and health; and
 - "(iii) environmental performance;
- "(D) the demonstrated capacity of the eligible entity to carry out the proposed project; and
- "(E) the need of the eligible entity for assistance; and
- "(2) give priority to applications from partnerships.
 - "(d) ELIGIBLE ACTIVITIES.—
- "(1) IN GENERAL.—An eligible entity awarded a grant under this section may use the grant funds—
- "(A) to create or enable State or regional partnerships to provide training and materials to—
- "(i) builders, contractors and subcontractors, architects, and other design and construction professionals, relating to meeting updated building energy codes in a cost-effective manner; and
- "(ii) building code officials, relating to improving implementation of and compliance with building energy codes;
- "(B) to collect and disseminate quantitative data on construction and codes implementation, including code pathways, performance metrics, and technologies used;
- "(C) to develop and implement a plan for highly effective codes implementation, including measuring compliance;
- "(D) to address various implementation needs in rural, suburban, and urban areas;
- "(E) to implement updates in energy codes for—
- "(i) new residential and commercial buildings (including multifamily buildings); and
- "(ii) additions and alterations to existing residential and commercial buildings (including multifamily buildings).
- "(2) RELATED TOPICS.—Training and materials provided using a grant under this section may include information on the relationship between energy codes and—
- "(A) cost-effective, high-performance, and zero-net-energy buildings;
- "(B) improving resilience, health, and safety;
- "(C) water savings and other environmental impacts; and
- "(D) the economic impacts of energy codes.
 "(e) AUTHORIZATION OF APPROPRIATIONS.—
 There are authorized to be appropriated to the Secretary to carry out this section—
- "(1) \$25,000,000 for each of fiscal years 2021 through 2030; and
- "(2) for fiscal year 2030 and each fiscal year thereafter, such sums as are necessary."
- (b) CONFORMING AMENDMENT.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended, in the matter preceding paragraph (1), by striking "As used in" and inserting "Except as otherwise provided in".
- SA 1515. Mr. DURBIN submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 432, between lines 6 and 7, insert the following:

- (8) PROHIBITION OF CRITICAL MINERAL MINING IN CERTAIN PROTECTED AREAS.—
- (A) DEFINITION OF PROTECTED AREA.—In this paragraph, the term "protected area" means a national monument established under chapter 3203 of title 54, United States Code (commonly known as the "Antiquities Act of 1906"), as of January 20, 2017.
- (B) PROHIBITION.—Notwithstanding any other provision of law, the Secretaries may not issue a critical mineral exploration or mine permit with respect to a protected area.
- SA 1516. Mr. BROWN submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

TITLE IV—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986

SEC. 4001. INCLUDING FUEL CELLS USING ELECTROMECHANICAL PROCESSES FOR PURPOSES OF THE ENERGY TAX CREDIT.

- (a) IN GENERAL.—Paragraph (1) of section 48(c) of the Internal Revenue Code of 1986 is amended—
- (1) in subparagraph (A)(i), by inserting "or electromechanical" after "electrochemical", and
- (2) in subparagraph (C)—
- (A) by inserting ", or linear generator assembly," after "a fuel cell stack assembly", and
- (B) by striking "electrochemical means" and inserting "electrochemical or electromechanical means without the use of rotating parts".
- (b) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SA 1517. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 521, lines 13 and 14, strike "labor management organization" and insert "community partnership".

On page 521, line 21, strike "labor management organization" and insert "community partnership".

On page 522, line 11, strike "LABOR MAN-AGEMENT ORGANIZATION" and insert "COMMU-NITY PARTNERSHIP".

On page 522, line 12, strike "labor management organization" and insert "community partnership".

SA 1518. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table: as follows:

On page 37, between lines 15 and 16, insert the following:

(d) APPRENTICESHIPS.—If the on-the-job training under a career skills training program funded by a grant under this section

includes an apprenticeship, the apprenticeship shall be an apprenticeship program (as defined in section 2301).

On page 37, line 16, strike "(d)" and insert "(e)"

On page 46, line 25, insert "(as defined in section 2301 of the American Energy Innovation Act of 2020)" after "programs".

- On page 527, between lines 3 and 4, insert the following:
- (6) APPRENTICESHIPS.—If on-the-job training funded by a grant under the pilot program includes an apprenticeship, the apprenticeship shall be an apprenticeship program.

SA 1519. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 17, line 11, insert "public" before "schools".

SA 1520. Mrs. MURRAY submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. MURKOWSKI to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:

On page 37, between lines 15 and 16, insert the following:

- (d) APPRENTICESHIPS.—If the on-the-job training under a career skills training program funded by a grant under this section includes an apprenticeship, the apprenticeship shall be an apprenticeship program (as defined in section 2301).
- On page 37, line 16, strike "(d)" and insert "(e)".

On page 46, line 25, insert "(as defined in section 2301 of the American Energy Innovation Act of 2020)" after "programs".

On page 521, lines 13 and 14, strike "labor management organization" and insert "community partnership".

On page 521, line 21, strike "labor management organization" and insert "community partnership".

On page 522, line 11, strike "LABOR MANAGEMENT ORGANIZATION" and insert "COMMUNITY PARTNERSHIP".

On page 522, line 12, strike "labor management organization" and insert "community partnership".

- On page 527, between lines 3 and 4, insert the following:
- (6) APPRENTICESHIPS.—If on-the-job training funded by a grant under the pilot program includes an apprenticeship, the apprenticeship shall be an apprenticeship program.
- SA 1521. Mrs. HYDE-SMITH submitted an amendment intended to be proposed to amendment SA 1407 proposed by Ms. Murkowski to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:
- At the appropriate place, insert the following:

SEC. ___. NUCLEAR FILTRATION TESTING AND RESEARCH PROGRAM.

(a) IN GENERAL.—Subtitle A of title XLIV of the Atomic Energy Defense Act (50 U.S.C. 2581 et seq.) is amended by adding at the end the following new section:

"SEC. 4410. NUCLEAR FILTRATION TESTING AND RESEARCH PROGRAM.

"(a) IN GENERAL.—The Secretary of Energy shall—

"(1) designate, as a federally funded research and development center, a research center at an institution of higher education not designated as a federally funded research and development center or a university-affiliated research center as of the date of the enactment of this section; and

"(2) enter into a formal arrangement with that research center to carry out a partnership program to research, develop, and demonstrate new advancements with respect to nuclear containment ventilation systems.

"(b) AUTHORIZATION OF APPROPRIATIONS.— There are authorized to be appropriated to the Secretary to carry out this section \$10,000,000 for fiscal year 2021 and each fiscal year thereafter."

(b) CLERICAL AMENDMENT.—The table of contents for the Atomic Energy Defense Act is amended by inserting after the item relating to section 4409 the following new item:

"Sec. 4410. Nuclear filtration testing and research program.".

SA 1522. Mr. McCONNELL (for Mr. ALEXANDER) proposed an amendment to the bill S. 2683, to establish a task force to assist States in implementing hiring requirements for child care staff members to improve child safety; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Child Care Protection Improvement Act of 2020".

SEC. 2. TASK FORCE TO ASSIST IN IMPROVING CHILD SAFETY.

- (a) ESTABLISHMENT.—There is established a task force, to be known as the Interagency Task Force for Child Safety (referred to in this section as the "Task Force") to identify, evaluate, and recommend best practices and technical assistance to assist Federal and State agencies in fully implementing the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990 (42 U.S.C. 9858f(b)) for child care staff members.
- (b) COMPOSITION.—Not later than 60 days after the date of enactment of this Act, the President shall appoint the members of the Task Force, which shall—
- (1) consist of only Federal officers and employees; and
 - (2) include-
- (A) the Director of the Office of Child Care of the Department of Health and Human Services (or the Director's designee), the Associate Commissioner of the Children's Bureau of the Department of Health and Human Services (or the Associate Commissioner's designee), and the Director of the Federal Bureau of Investigation (or the Director's designee); and
- (B) such other Federal officers and employees (or their designees) as may be appointed by the President.
- (c) CHAIRPERSON.—The chairperson of the Task Force shall be the Assistant Secretary of the Administration for Children and Families of the Department of Health and Human Services.
- (d) CONSULTATION.—The Task Force shall consult with representatives from State child care agencies, State child protective services, State criminal justice agencies, providers of child care services, including providers in the private sector, and other relevant stakeholders on identifying problems in implementing, and proposing solutions to implement, the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990, as described in that section. Such consultation shall include consultation with State agencies that are at different stages of such implementation.

- (e) TASK FORCE DUTIES.—The Task Force shall—
- (1) develop recommendations for improving implementation of the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990, including recommendations about how the Task Force and member agencies will collaborate and coordinate efforts to implement such requirements, as described in that section; and
- (2) develop recommendations in which the Task Force identifies best practices and evaluates technical assistance to assist relevant Federal and State agencies in implementing section 658H(b) of the Child Care and Development Block Grant Act of 1990, which identification and evaluation shall include—
- (A) an analysis of available research and information at the Federal and State levels regarding the status of the interstate requirements of that section for child care staff members who have resided in one or more States during the previous 5 years and who seek employment in a child care program in a different State;
- (B) a list of State agencies that are not responding to interstate requests covered by that section for relevant information on child care staff members;
- (C) identification of the challenges State agencies are experiencing in responding to such interstate requests;
- (D) an analysis of the length of time it takes the State agencies in a State to receive such results from State agencies in another State in response to such an interstate request, in accordance with that section;
- (E) an analysis of the average processing time for the interstate requests, in accordance with that section:
- (F) identification of any fees (and entities responsible for paying any such fees) associated with the interstate requests in each State to meet requirements, in accordance with section 658H of the Child Care and Development Block Grant Act of 1990 (42 U.S.C. 9858f), including identification of—
- (i) the extent to which such fees are consistent with subsection (f) of that section; and
- (ii) information regarding factors that impact such fees;
- (G) a list of States that are participating in the National Fingerprint File program, as administered by the Federal Bureau of Investigation, and an analysis of reasons States have or have not chosen to participate in the program, including barriers to participation such as barriers related to State regulatory requirements and statutes; and
- (H) a list of States that have closed record laws or systems that prevent the States from sharing complete criminal records data or information with State agencies in another State.
- (f) MEETINGS.—Not later than 3 months after the date of enactment of this Act, the Task Force shall hold its first meeting.
- (g) Final Report.—Not later than 1 year after the first meeting of the Task Force, the Task Force shall submit to the Secretary of Health and Human Services, the Committee on Health, Education, Labor, and Pensions of the Senate, and the Committee on Education and Labor of the House of Representatives a final report containing all of the recommendations required by paragraphs (1) and (2) of subsection (e). The report shall also include a list of the members of the Task Force, the agencies such members represent, and the individuals and entities with whom the Task Force consulted under subsection (d).
- (h) NO COMPENSATION FOR MEMBERS.—A member of the Task Force shall serve without compensation in addition to any compensation received for the service of the

- member as an officer or employee of the United States.
- (i) EXEMPTION FROM FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Task Force.
- (j) SUNSET.—The Task Force shall terminate 1 year after submitting its final report under subsection (g), but not later than the end of fiscal year 2021.
- SA 1523. Mr. McCONNELL (for Mr. Blunt) proposed an amendment to the bill S. 2321, to require the Secretary of the Treasury to mint a coin in commemoration of the 100th anniversary of the establishment of Negro Leagues baseball; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Negro Leagues Baseball Centennial Commemorative Coin Act".

SEC. 2. FINDINGS.

The Congress finds the following:

- (1) The year 2020 marks the 100th anniversary of the establishment of the Negro National League, a professional baseball league formed in response to African-American players being banned from the major leagues.
- (2) On February 13, 1920, Andrew "Rube" Foster convened a meeting of 8 independent African-American baseball team owners at the Paseo YMCA in Kansas City, Missouri, to form a "league of their own," establishing the Negro National League, the first successful, organized professional African-American baseball league in the United States.
- (3) Soon, additional leagues formed in eastern and southern States.
- (4) The Negro Leagues would operate for 40 years until 1960.
- (5) The story of the Negro Leagues is a story of strong-willed athletes who forged a glorious history in the midst of an inglorious era of segregation in the United States.
- (6) The passion of the Negro Leagues players for the "National Pastime" would not only change the game, but also the United States.
- (7) The creation of the Negro Leagues provided a playing field for more than 2,600 African-American and Hispanic baseball players to showcase their world-class baseball abilities.
- (8) The Negro Leagues introduced an exciting brand of baseball that was in stark contrast to Major League Baseball.
- (9) A fast, aggressive style of play attracted black and white fans who sat together to watch those games at a time when it was virtually unheard of to interact socially in such a way.
- (10) Negro Leagues baseball would become a catalyst for economic development across the United States in major urban centers such as Kansas City, St. Louis, New York, Memphis, Baltimore, Washington, DC, Chicago, and Atlanta.
- (11) The Negro Leagues pioneered "Night Baseball" in 1930, 5 years before Major League Baseball, and would introduce gamechanging innovations such as shin guards and the batting helmet.
- (12) The Negro Leagues helped make the National Pastime a global game as players from the Negro Leagues—
- (A) were the first people from the United States to play in many Spanish-speaking countries; and
- $\left(\mathrm{B}\right)$ introduced professional baseball to the Japanese in 1927.
- (13) Jackie Robinson, a military veteran and former member of the Negro Leagues' Kansas City Monarchs, would break Major

- League Baseball's color barrier on April 15, 1947, with the Brooklyn Dodgers, paving the way for other African-American and Hispanic baseball players.
- (14) The Negro Leagues were born out of segregation yet would become a driving force for social change in the United States.
- (15) The Negro Leagues produced future Major League Baseball stars, including Leroy "Satchel" Paige, Larry Doby, Willie Mays, Henry Aaron, Ernie Banks, and Roy Campanella.
- (16) The Negro Leagues Baseball Museum was established in Kansas City, Missouri, in 1990—
- $\left(A\right)$ to save from extinction a precious piece of Americana and baseball history; and
- (B) to use the many life lessons of the powerful story of triumph over adversity of Negro Leagues players to promote tolerance, diversity, and inclusion.
- (17) In 2006, Congress granted National Designation to the Negro Leagues Baseball Museum, recognizing it as "America's Home" for Negro Leagues baseball history.

SEC. 3. COIN SPECIFICATIONS.

- (a) DENOMINATIONS.—The Secretary of the Treasury (hereafter in this Act referred to as the "Secretary") shall mint and issue the following coins:
- (1) \$5 GOLD COINS.—Not more than 50,000 \$5 coins, which shall—
 - (A) weigh 8.359 grams;
 - (B) have a diameter of 0.850 inches; and
 - (C) contain not less than 90 percent gold.
- (2) \$1 SILVER COINS.—Not more than 400,000 \$1 coins, which shall—
 - (A) weigh 26.73 grams;
 - (B) have a diameter of 1.500 inches; and
 - (C) contain not less than 90 percent silver.
- (3) HALF-DOLLAR CLAD COINS.—Not more than 400,000 half-dollar coins which shall— $\,$
 - (A) weigh 11.34 grams;
 - (B) have a diameter of 1.205 inches; and
- (C) be minted to the specifications for half-dollar coins contained in section 5112(b) of title 31, United States Code.
- (b) LEGAL TENDER.—The coins minted under this Act shall be legal tender, as provided in section 5103 of title 31, United States Code
- (c) NUMISMATIC ITEMS.—For purposes of section 5134 of title 31, United States Code, all coins minted under this Act shall be considered to be numismatic items.

SEC. 4. DESIGNS OF COINS.

- (a) DESIGN REQUIREMENTS.—
- (1) IN GENERAL.—The designs of the coins minted under this Act shall be emblematic of the Negro Leagues Baseball Museum and its mission to promote tolerance, diversity, and inclusion.
- (2) DESIGNATION AND INSCRIPTIONS.—On each coin minted under this Act there shall be—
 - (A) a designation of the value of the coin;
- (B) an inscription of the year "2022"; and
- (C) inscriptions of the words "Liberty", "In God We Trust", "United States of America", and "E Pluribus Unum".
- (b) Selection.—The designs for the coins minted under this Act shall be— $\,$
- (1) selected by the Secretary after consultation with the Negro Leagues Baseball Museum and the Commission of Fine Arts; and
- (2) reviewed by the Citizens Coinage Advisory Committee.

SEC. 5. ISSUANCE OF COINS.

- (a) QUALITY OF COINS.—Coins minted under this Act shall be issued in uncirculated and proof qualities.
- (b) MINT FACILITIES.—Only 1 facility of the United States Mint may be used to strike any particular quality of the coins minted under this Act.
- (c) PERIOD FOR ISSUANCE.—The Secretary may issue coins minted under this Act only

during the 1-year period beginning on January 1, 2022.

SEC. 6. SALE OF COINS.

- (a) SALE PRICE.—The coins issued under this Act shall be sold by the Secretary at a price equal to the sum of—
- (1) the face value of the coins;
- (2) the surcharge provided in section 7(a) with respect to such coins; and
- (3) the cost of designing and issuing the coins (including labor, materials, dies, use of machinery, overhead expenses, marketing, and shipping).
- (b) Bulk Sales.—The Secretary shall make bulk sales of the coins issued under this Act at a reasonable discount.
 - (c) Prepaid Orders.—
- (1) IN GENERAL.—The Secretary shall accept prepaid orders for the coins minted under this Act before the issuance of such coins.
- (2) DISCOUNT.—Sale prices with respect to prepaid orders under paragraph (1) shall be at a reasonable discount.

SEC. 7. SURCHARGES.

- (a) IN GENERAL.—All sales of coins issued under this Act shall include a surcharge of—
- (1) \$35 per coin for the \$5 coin;
- (2) \$10 per coin for the \$1 coin; and
- (3) \$5 per coin for the half-dollar coin.
- (b) DISTRIBUTION.—Subject to section 5134(f)(1) of title 31, United States Code, all surcharges received by the Secretary from the sale of coins issued under this Act shall be promptly paid by the Secretary to the Negro Leagues Baseball Museum for educational and outreach programs and exhibits.
- (c) AUDITS.—The Negro Leagues Baseball Museum shall be subject to the audit requirements of section 5134(f)(2) of title 31, United States Code, with regard to the amounts received under subsection (b).
- (d) LIMITATION.—Notwithstanding subsection (a), no surcharge may be included with respect to the issuance under this Act of any coin during a calendar year if, as of the time of such issuance, the issuance of such coin would result in the number of commemorative coin programs issued during such year to exceed the annual 2 commemorative coin program issuance limitation under section 5112(m)(1) of title 31, United States Code (as in effect on the date of the enactment of this Act). The Secretary of the Treasury may issue guidance to carry out this subsection.

SEC. 8. FINANCIAL ASSURANCES.

The Secretary shall take such actions as may be necessary to ensure that—

(1) minting and issuing coins under this Act will not result in any net cost to the United States Government: and

(2) no funds, including applicable surcharges, are disbursed to any recipient designated in section 7 until the total cost of designing and issuing all of the coins authorized by this Act (including labor, materials, dies, use of machinery, overhead expenses, marketing, and shipping) is recovered by the United States Treasury, consistent with sections 5112(m) and 5134(f) of title 31, United States Code.

SEC. 9. MARKETING AND EDUCATIONAL CAMPAIGN.

The Secretary shall develop and execute a marketing, advertising, promotional, and educational program to promote the collecting of the coins authorized under this subsection.

SA 1524. Mr. McCONNELL (for Ms. ERNST) proposed an amendment to the bill S. 1757, to award a Congressional Gold Medal, collectively, to the United States Army Rangers Veterans of

World War II in recognition of their extraordinary service during World War II: as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "United States Army Rangers Veterans of World War II Congressional Gold Medal Act".

SEC. 2. DEFINITIONS.

In this Act—

- (1) the term "Secretary" means the Secretary of the Treasury; and
- (2) the term "United States Army Rangers Veteran of World War II" means any individual who—
- (A) served in the Armed Forces—
- (i) honorably;
- (ii) in an active duty status; and
- (iii) at any time during the period beginning on June 19, 1942, and ending on September 2, 1945; and
- (B) was assigned to a Ranger Battalion of the Army at any time during the period described in subparagraph (A)(iii).

SEC. 3. FINDINGS.

Congress finds the following:

- (1) In World War II, the Army formed 6 Ranger Battalions and 1 provisional battalion. All members of the Ranger Battalions were volunteers. The initial concept of Ranger units drew from the British method of using highly trained "commando" units and the military tradition of the United States of utilizing light infantry for scouting and raiding operations.
- (2) The Ranger Battalions of World War II consisted of—
- (A) the 1st Ranger Infantry Battalion, which was activated on June 19, 1942, in Northern Ireland;
- (B) the 2d Ranger Infantry Battalion, which was activated on April 1, 1943, at Camp Forrest. Tennessee;
- (C) the 3d Ranger Infantry Battalion, which was— $\,$
- (i) activated as provisional on May 21, 1943, in North Africa; and
- (ii) constituted on July 21, 1943, and concurrently consolidated with the provisional unit described in clause (i);
- (D) the 4th Ranger Infantry Battalion, which was— $\,$
- $\scriptstyle (i)$ activated as provisional on May 29, 1943, in North Africa; and
- (ii) constituted on July 21, 1943, and concurrently consolidated with the provisional unit described in clause (i);
- (E) the 5th Ranger Infantry Battalion, which was activated on September 1, 1943, at Camp Forrest. Tennessee:
- (F) the 6th Ranger Infantry Battalion, which was—
- (i) originally activated on January 20, 1941, at Fort Lewis, Washington, as the 98th Field Artillery Battalion; and
- (ii) converted and redesignated on September 26, 1944, as the 6th Ranger Infantry Battalion; and
- (G) the 29th Ranger Infantry Battalion, a provisional Army National Guard unit that
- (i) activated on December 20, 1942, at Tidworth Barracks, England; and
- (ii) disbanded on October 18, 1943.
- (3) The first combat operations of Army Rangers occurred on August 19, 1942, when 50 Rangers took part in the British-Canadian raid on the French coastal town of Dieppe.
- (4) The 1st Ranger Battalion, under the leadership of Major William O. Darby, was used in full strength during the landings at Arsew, Algeria, during the North African campaign. Due to the success of the Rangers in several difficult battles, particularly at El Guettar in March and April of 1943, 2 addi-

- tional Ranger Battalions were organized in North Africa.
- (5) During the North African campaign, the 1st Ranger Battalion was awarded battle honors for its actions in Tunisia. On March 20, 1943, the Battalion penetrated enemy lines and captured the position Djebel el Ank in a nighttime attack, taking more than 200 prisoners. Three days later, the battalion was attacked by the 10th Panzer division of the German Afrika Korps and, despite heavy losses, defended its position and inflicted considerable losses on the enemy. This engagement constituted what General Omar Bradley labeled "the first solid, indisputable defeat we inflicted on the German army in the war". These actions demonstrated the ability of the Rangers to fight in difficult terrain and the courage to endure despite being outnumbered and exposed to heavy enemy fire.
- (6) The 29th provisional Ranger Battalion was formed from volunteers drawn from the 29th Infantry Division stationed in England in the fall of 1942. The Battalion was activated on December 20, 1942, and accompanied British commandos on 3 small-scale raids in Norway. Nineteen members of the 29th Ranger Battalion conducted a raid on a German radar site in France on the night of September 3, 1943. After that raid, the 29th Ranger Battalion was disbanded because new Ranger units, the 2d and 5th Battalions, were being formed.
- (7) During the summer and fall of 1943, the 1st, 3d, and 4th Ranger Battalions were heavily involved in the campaign in Sicily and the landings in Italy. The 1st and 4th Ranger Battalions conducted a night amphibious landing in Sicily and secured the landing beaches for the main force. The 3d Battalion landed separately at Licata, Sicily, and was able to silence gun positions on an 82-foot cliff overlooking the invasion beaches.
- (8) During the invasion of Italy, the 1st, 3d, and 4th Ranger Battalions landed at Maiori with the mission of seizing the high ground and protecting the flank of the remainder of the main landing by the United States. Despite suffering from low ammunition and inadequate provisions and water, the Rangers fended off numerous enemy counterattacks against the mountain passes and via radio directed naval gunfire on the enemy forces approaching the beaches below.
- (9) After the invasion of Italy, Rangers continued to be used, often in night attacks, to seize key terrain ahead of the advancing Allied forces. At the Anzio beachhead, the majority of the 1st, 3d, and 4th Ranger Battalions sustained heavy casualties after being cut off behind German lines. The Rangers had planned to infiltrate German positions under the cover of darkness and make a dawn attack on a critical road junction but were pinned down by enemy tanks and an elite German paratrooper unit. After 12 hours of desperate fighting and a failed relief attempt, the majority of the Ranger force was killed, wounded, or captured. Only 6 Rangers from the 1st and 3d Battalions, out of more than 767 men, returned to friendly lines. The 4th Battalion, which had been in reserve, also suffered 60 killed and 120 wounded out of 550 men. These 3 battalions were inactivated and the survivors were transferred to other units.
- (10) In the United States, and later in Scotland, the 2d and 5th Ranger Battalions were formed to undertake operations in Western Europe. Those Battalions were engaged on D-Day, assaulting German positions at the Pointe du Hoc coastal battery, and remained in combat through September of 1944. Specifically, Rangers in the 2d Battalion, under the command of Lieutenant Colonel James E. Rudder—

- (A) overcame mines, machine gun fire, and enemy artillery while scaling the 100-foot high cliffs at Pointe du Hoc;
- (B) held against intense German efforts to retake the position; and
- (C) after reaching the top of the cliffs, moved inland roughly 1 mile and sustained heavy casualties while searching for, and ultimately destroying, a German heavy artillery battery.
- (11) During June, July, and August of 1944, the 2d and 5th Ranger Battalions were engaged in the campaign in Brest, which included close-range fighting in hedgerows and numerous villages. Later, in operations in Western Germany, the Battalions were frequently used to attack in darkness and gain vital positions to pave the way for the main Army attacks.
- (12) During the final drive into Germany in late February and early March 1945, the 5th Ranger Battalion was cited for battle honors for outstanding performance. Under the cover of darkness the unit drove into German lines and secured the objective area blocking the main German supply route. The Germans attacked the position of the Rangers from both sides, resulting in heavy Ranger casualties during 5 days of fighting. As a result of the actions of the Rangers, the main Army attack was able to overcome German defenses more easily, occupy the vital city of Trier, and reach the Rhine River.
- (13) The 6th Ranger Battalion operated in the Pacific. In the most notable exploit of the 6th Ranger Battalion, in January and February of 1945, the Battalion formed the nucleus of a rescue force that liberated more than 500 Allied prisoners, including prisoners from the United States, from the Cabanatuan prisoner of war camp in the Philippines. With the help of local Filipino guerillas, the Rangers, led by Lieutenant Colonel Henry A. Mucci, demonstrated extraordinary heroism by infiltrating Japanese-held territory to reach the prisoners of war and prevent them from being killed by the Japanese. After a 25-mile march at night through the jungle, the unit killed all Japanese sentries with no loss of life of the prisoners of war. The unit successfully returned to American lines having lost only 2 soldiers killed and having another 2 wounded.
 - (14) The 1st Ranger Infantry Battalion-
- (A) participated in the campaigns of-
- (i) Algeria-French Morocco (with arrowhead):
- (ii) Tunisia;
- (iii) Sicily (with arrowhead);
- (iv) Naples-Foggia (with arrowhead);
- (v) Anzio (with arrowhead); and
- (vi) Rome-Arno: and
- (B) for its contributions, received—
- (i) the Presidential Unit Citation (Army) streamer embroidered with GUETTAR"; and
- (ii) the Presidential Unit Citation (Army) and streamer embroidered "SALERNO"
 - (15) The 2d Ranger Infantry Battalion-
 - (A) participated in the campaigns of-
 - (i) Normandy (with arrowhead); (ii) Northern France;

 - (iii) Rhineland;
 - (iv) Ardennes-Alsace; and
 - (v) Central Europe; and
 - (B) for its contributions, received—
- (i) the Presidential Unit Citation (Army) and streamer embroidered with "POINTE DU HOE": and
- (ii) the French Croix de Guerre with Silver-Gilt Star, World War II, and streamer embroidered with "POINTE DU HOE"
 - (16) The 3d Ranger Infantry Battalion-
 - (A) participated in the campaigns of-
 - (i) Sicily (with arrowhead);
 - (ii) Naples-Foggia (with arrowhead);

- (iii) Anzio (with arrowhead); and
- (iv) Rome-Arno; and
- (B) for its contributions, received the Presidential Unit Citation (Army) and streamer embroidered with "SALERNO"
 - (17) The 4th Ranger Infantry Battalion-(A) participated in the campaigns of-
 - (i) Sicily (with arrowhead);
 - (ii) Naples-Foggia (with arrowhead);
 - (iii) Anzio (with arrowhead); and
 - (iv) Rome-Arno; and
- (B) for its contributions, received the Presidential Unit Citation (Army) and streamer embroidered with "SALERNO"
 - (18) The 5th Ranger Infantry Battalion-
 - (A) participated in the campaigns of—
 - (i) Normandy (with arrowhead);
 - (ii) Northern France;
 - (iii) Rhineland:
 - (iv) Ardennes-Alsace; and
 - (v) Central Europe: and
 - (B) for its contributions, received—
- (i) the Presidential Unit Citation (Army) streamer embroidered with "NOR-MANDY BEACHHEAD"
- (ii) the Presidential Unit Citation (Army) and streamer embroidered with RIVER AREA"; and "SAAR
- (iii) the French Croix de Guerre with Silver-Gilt Star, World War II, and streamer embroidered with "NORMANDY"
 - (19) The 6th Ranger Infantry Battalion-
 - (A) participated in the campaigns of-
- (i) New Guinea;
- (ii) Leyte (with arrowhead); and
- (iii) Luzon; and
- (B) for its contributions, received-
- (i) the Presidential Unit Citation (Army) streamer embroidered with "CABU, LUZON"; and
- (ii) the Philippine Presidential Unit Citation and streamer embroidered with "17 OC-TOBER 1944 TO 4 JULY 1945"
- (20) The United States will be forever indebted to the United States Army Rangers Veterans of World War II, whose bravery and sacrifice in combat contributed greatly to the military success of the United States and the allies of the United States.

SEC. 4. CONGRESSIONAL GOLD MEDAL.

- (a) AWARD AUTHORIZED.—The President pro tempore of the Senate and the Speaker of the House of Representatives shall make appropriate arrangements for the award, on behalf of Congress, of a single gold medal of appropriate design to the United States Army Rangers Veterans of World War II, in recognition of their dedicated service during World War II.
- (b) DESIGN AND STRIKING.—For the purposes of the award described in subsection (a), the Secretary shall strike the gold medal with suitable emblems, devices, and inscriptions, to be determined by the Secretary.
- (c) SMITHSONIAN INSTITUTION -
- (1) IN GENERAL.—Following the award of the gold medal in honor of the United States Army Rangers Veterans of World War II, the gold medal shall be given to the Smithsonian Institution, where the medal shall be-
- (A) available for display, as appropriate; and
- (B) made available for research.
- (2) Sense of congress.—It is the sense of Congress that the Smithsonian Institution should make the gold medal received under paragraph (1) available for display elsewhere, particularly at other locations associated
- (A) the United States Army Rangers Veterans of World War II; or
 - (B) World War II.
- (d) DUPLICATE MEDALS.—Under regulations that the Secretary may prescribe, the Secretary may strike and sell duplicates in bronze of the gold medal struck under this section, at a price sufficient to cover the

cost of the medals, including the cost of labor, materials, dies, use of machinery, and overhead expenses.

SEC. 5. STATUS OF MEDAL.

- (a) NATIONAL MEDAL.—The gold medal struck under section 4 shall be a national medal for the purposes of chapter 51 of title 31, United States Code.
- (b) NUMISMATIC ITEMS.—For the purposes of section 5134 of title 31, United States Code, all medals struck under section 4 shall be considered to be numismatic items.
- SA 1525. Mrs. SHAHEEN submitted an amendment intended to be proposed to amendment SA 1514 proposed by Mr. PORTMAN (for himself and Mrs. SHA-HEEN) to the amendment SA 1407 proposed by Ms. Murkowski to the bill S. 2657, to support innovation in advanced geothermal research and development, and for other purposes; which was ordered to lie on the table; as follows:
- On page 28, line 19, strike "2021" and insert "2020".

AUTHORITY FOR COMMITTEES TO MEET

Mr. KENNEDY. Mr. President, I have 6 requests for committees to meet during today's session of the Senate. They have the approval of the Majority and Minority leaders.

Pursuant to rule XXVI, paragraph 5(a), of the Standing Rules of the Senate, the following committees are authorized to meet during today's session of the Senate:

COMMITTEE ON ARMED SERVICES

The Committee on Armed Services is authorized to meet during the session of the Senate on Thursday, March 5, 2020, at 9:30 a.m., to conduct a hearing. COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

The Committee on Banking, Housing, and Urban Affairs is authorized to meet during the session of the Senate on Thursday, March 5, 2020, at 10 a.m., to conduct a hearing.

> COMMITTEE ON ENERGY AND NATURAL RESOURCES

The Committee on Energy and Natural Resources is authorized to meet during the session of the Senate on Thursday, March 5, 2020, at 9:30 a.m., to conduct a hearing.

COMMITTEE ON FOREIGN RELATIONS

The Committee on Foreign Relations is authorized to meet during the session of the Senate on Thursday, March 5, 2020, at 10 a.m., to conduct a hearing.

COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

The Committee on Homeland Security and Governmental Affairs is authorized to meet during the session of the Senate on Thursday, March 5, 2020, at 9:30 a.m., to conduct a hearing.

COMMITTEE ON THE JUDICIARY

The Committee on the Judiciary is authorized to meet during the session of the Senate on Thursday, January 16, 2020, at 10 a.m., to conduct a hearing on the following nominations: Fernando L. Aenlle-Rocha, Stanley Blumenfeld, and Mark C. Scarsi, each to be a United

States District Judge for the Central District of California, John Charles Hinderaker, to be United States District Judge for the District of Arizona. John Leonard Badalamenti, to be United States District Judge for the Middle District of Florida, William Scott Hardy, to be United States District Judge for the Western District of Pennsylvania, John F. Heil III, to be United States District Judge for the Northern, Eastern and Western Districts of Oklahoma, David Cleveland Joseph, to be United States District Judge for the Western District of Louisiana, Anna M. Manasco, to be United States District Judge for the Northern District of Alabama, Drew B. Tipton, to be United States District Judge for the Southern District of Texas, and Grace Karaffa Obermann, of Virginia, Stephen Sidney Schwartz, of Virginia, Kathryn C. Davis, of Maryland, and Edward Hulvey Meyers, of Maryland, each to be a Judge of the United States Court of Federal Claims.

PRIVILEGES OF THE FLOOR

Mr. CARDIN. Mr. President, I ask unanimous consent that floor privileges be granted to Michael Thomas, a member of my staff, for the remainder of the 116th Congress.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. KENNEDY. Mr. President, I ask unanimous consent that Kyle Wood, an intern in Senator SULLIVAN's office, be granted floor privileges for the remainder of the month.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. SULLIVAN. Mr. President, I ask unanimous consent that Kyle Wood, an intern in my office, be granted floor privileges for the remainder of the month.

The PRESIDING OFFICER. Without objection, it is so ordered.

UNITED STATES ARMY RANGERS VETERANS OF WORLD WAR II CONGRESSIONAL GOLD MEDAL ACT

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Committee on Banking, Housing, and Urban Affairs be discharged from further consideration of S. 1757 and the Senate proceed to its immediate consideration.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (S. 1757) to award a Congressional Gold Medal, collectively, to the United States Army Rangers Veterans of World War II in recognition of their extraordinary service during World War II.

The PRESIDING OFFICER. Is there objection to proceeding to the measure?

There being no objection, the committee was discharged, and the Senate proceeded to consider the bill.

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Ernst substitute amendment at the desk be considered and agreed to; that the bill, as amended, be considered read a third time and passed; and that the motion to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment (No. 1524) in the nature of a substitute was agreed to.

(Purpose: In the nature of a substitute.)

(The amendment is printed in today's RECORD under "Text of Amendments.")

The bill (S. 1757), as amended, was ordered to be engrossed for a third reading, was read the third time, and passed.

CHILD CARE PROTECTION IMPROVEMENT ACT OF 2019

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Senate proceed to the immediate consideration of Calendar No. 370, S. 2683.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (S. 2683) to establish a task force to assist States in implementing hiring requirements for child care staff members to improve child safety.

The PRESIDING OFFICER. Is there objection to proceeding to the measure?

There being no objection, the Senate proceeded to consider the bill, which had been reported from the Committee on Health, Education, Labor, and Pensions, with an amendment to strike all after the enacting clause and insert in lieu thereof the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Child Care Protection Improvement Act of 2019".

SEC. 2. TASK FORCE TO ASSIST IN IMPROVING CHILD SAFETY.

(a) ESTABLISHMENT.—There is established a task force, to be known as the Interagency Task Force for Child Safety (referred to in this section as the "Task Force") to identify, evaluate, and recommend best practices and technical assistance to assist Federal and State agencies in fully implementing the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990 (42 U.S.C. 9858f(b)) for child care staff members.

(b) COMPOSITION.—Not later than 60 days after the date of enactment of this Act, the President shall appoint the members of the Task Force, which shall include—

(1) the Director of the Office of Child Care of the Department of Health and Human Services (or the Director's designee), the Associate Commissioner of the Children's Bureau of the Department of Health and Human Services (or the Associate Commissioner's designee), and the Director of the Federal Bureau of Investigation (or the Director's designee); and

(2) such other Federal officials (or their designees) as may be designated by the President.

(c) CHAIRPERSON.—The chairperson of the Task Force shall be the Assistant Secretary of the Administration for Children and Families.

(d) CONSULTATION.—The Task Force shall consult with representatives from State child care agencies, State child protective services,

State criminal justice agencies, and other relevant stakeholders on identifying problems in implementing, and proposing solutions to implement, the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990, as described in that section.

(e) TASK FORCE DUTIES.—The Task Force shall—

(1) develop recommendations for improving implementation of the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990, including recommendations about how the Task Force and member agencies will collaborate and coordinate efforts to implement such requirements, as described in that section: and

(2) develop recommendations in which the Task Force identifies best practices and evaluates technical assistance to assist relevant Federal and State agencies in implementing section 658H(b) of the Child Care and Development Block Grant Act of 1990, which identification and evaluation shall include—

(A) an analysis of available research and information at the Federal and State levels regarding the status of the interstate requirements of that section for child care staff members who have resided in one or more States during the previous 5 years and who seek employment in a child care program in a different State;

(B) a list of State agencies that are not responding to interstate requests covered by that section for relevant information on child care staff members;

(C) identification of the challenges State agencies are experiencing in responding to such interstate requests;

(D) an analysis of the length of time it takes the State agencies in a State to receive such results from State agencies in another State in response to such an interstate request, in accordance with that section;

(E) an analysis of the average processing time for the interstate requests, in accordance with that section;

(F) identification of the fees associated with the interstate requests in each State to meet requirements, in accordance with that section;

(G) a list of States that are participating in the National Fingerprint File program, as administered by the Federal Bureau of Investigation, and an analysis of reasons States have or have not chosen to participate in the program, including barriers to participation such as barriers related to State regulatory requirements and statutes; and

(H) a list of States that have closed record laws or systems that prevent the States from sharing complete criminal records data or information with State agencies in another State.

(f) MEETINGS.—Not later than 3 months after the date of enactment of this Act, the Task Force shall hold its first meeting.

(g) FINAL REPORT.—Not later than 1 year after the first meeting of the Task Force, the Task Force shall submit to the Secretary of Health and Human Services, the Committee on Health, Education, Labor, and Pensions of the Senate, and the Committee on Education and Labor of the House of Representatives a final report containing all of the recommendations required by paragraphs (1) and (2) of subsection (e). The report shall also include a list of the members of the Task Force, the agencies such members represent, and the individuals and entities with whom the Task Force consulted under subsection (d).

(h) EXEMPTION FROM FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Task Force.

(i) SUNSET.—The Task Force shall terminate 1 year after submitting its final report, but not later than the end of fiscal year 2021.

Mr. McCONNELL. Mr. President, I ask unanimous consent that the committee-reported amendment be withdrawn; that the Alexander substitute

amendment at the desk be agreed to; and that the bill, as amended, be considered read a third time.

The PRESIDING OFFICER. Without objection, it is so ordered.

The committee-reported amendment in the nature of a substitute was withdrawn.

The amendment (No. 1522) was agreed to as follows:

(Purpose: In the nature of a substitute)

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Child Care Protection Improvement Act of 2020".

SEC. 2. TASK FORCE TO ASSIST IN IMPROVING CHILD SAFETY.

- (a) ESTABLISHMENT.—There is established a task force, to be known as the Interagency Task Force for Child Safety (referred to in this section as the "Task Force") to identify, evaluate, and recommend best practices and technical assistance to assist Federal and State agencies in fully implementing the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990 (42 U.S.C. 9858f(b)) for child care staff members.
- (b) COMPOSITION.—Not later than 60 days after the date of enactment of this Act, the President shall appoint the members of the Task Force, which shall—
- (1) consist of only Federal officers and employees; and
 - (2) include—
- (A) the Director of the Office of Child Care of the Department of Health and Human Services (or the Director's designee), the Associate Commissioner of the Children's Bureau of the Department of Health and Human Services (or the Associate Commissioner's designee), and the Director of the Federal Bureau of Investigation (or the Director's designee); and
- (B) such other Federal officers and employees (or their designees) as may be appointed by the President.
- (c) CHAIRPERSON.—The chairperson of the Task Force shall be the Assistant Secretary of the Administration for Children and Families of the Department of Health and Human Services.
- (d) CONSULTATION.—The Task Force shall consult with representatives from State child care agencies, State child protective services, State criminal justice agencies, providers of child care services, including providers in the private sector, and other relevant stakeholders on identifying problems in implementing, and proposing solutions to implement, the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990, as described in that section. Such consultation shall include consultation with State agencies that are at different stages of such implementation.
- (e) Task Force Duties.—The Task Force shall—
- (1) develop recommendations for improving implementation of the requirements of section 658H(b) of the Child Care and Development Block Grant Act of 1990, including recommendations about how the Task Force and member agencies will collaborate and coordinate efforts to implement such requirements, as described in that section; and
- (2) develop recommendations in which the Task Force identifies best practices and evaluates technical assistance to assist relevant Federal and State agencies in implementing section 658H(b) of the Child Care and Development Block Grant Act of 1990, which identification and evaluation shall include—

- (A) an analysis of available research and information at the Federal and State levels regarding the status of the interstate requirements of that section for child care staff members who have resided in one or more States during the previous 5 years and who seek employment in a child care program in a different State;
- (B) a list of State agencies that are not responding to interstate requests covered by that section for relevant information on child care staff members;
- (C) identification of the challenges State agencies are experiencing in responding to such interstate requests;
- (D) an analysis of the length of time it takes the State agencies in a State to receive such results from State agencies in another State in response to such an interstate request, in accordance with that section:
- (E) an analysis of the average processing time for the interstate requests, in accordance with that section:
- (F) identification of any fees (and entities responsible for paying any such fees) associated with the interstate requests in each State to meet requirements, in accordance with section 658H of the Child Care and Development Block Grant Act of 1990 (42 U.S.C. 9858f), including identification of—
- (i) the extent to which such fees are consistent with subsection (f) of that section; and
- (ii) information regarding factors that impact such fees;
- (G) a list of States that are participating in the National Fingerprint File program, as administered by the Federal Bureau of Investigation, and an analysis of reasons States have or have not chosen to participate in the program, including barriers to participation such as barriers related to State regulatory requirements and statutes; and
- (H) a list of States that have closed record laws or systems that prevent the States from sharing complete criminal records data or information with State agencies in another State
- (f) MEETINGS.—Not later than 3 months after the date of enactment of this Act, the Task Force shall hold its first meeting.
- (g) Final Report.—Not later than 1 year after the first meeting of the Task Force, the Task Force shall submit to the Secretary of Health and Human Services, the Committee on Health, Education, Labor, and Pensions of the Senate, and the Committee on Education and Labor of the House of Representatives a final report containing all of the recommendations required by paragraphs (1) and (2) of subsection (e). The report shall also include a list of the members of the Task Force, the agencies such members represent, and the individuals and entities with whom the Task Force consulted under subsection (d).
- (h) No Compensation for Members.—A member of the Task Force shall serve without compensation in addition to any compensation received for the service of the member as an officer or employee of the United States.
- (i) EXEMPTION FROM FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Task Force.
- (j) SUNSET.—The Task Force shall terminate 1 year after submitting its final report under subsection (g), but not later than the end of fiscal year 2021.

The bill was ordered to be engrossed for a third reading and was read the third time.

Mr. McCONNELL. I know of no further debate on the bill, as amended.

The PRESIDING OFFICER. Is there further debate on the bill, as amended?

The bill having been read the third time, the question is, Shall the bill pass?

The bill (S. 2683), as amended, was passed.

Mr. McCONNELL. Mr. President, I ask unanimous consent that the motion to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

CITIZENSHIP FOR CHILDREN OF MILITARY MEMBERS AND CIVIL SERVANTS ACT

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Committee on the Judiciary be discharged from further consideration of H.R. 4803 and the Senate proceed to its immediate consideration.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (H.R. 4803) to facilitate the automatic acquisition of citizenship for lawful permanent resident children of military and Federal Government personnel residing abroad, and for other purposes.

There being no objection, the committee was discharged, and the Senate proceeded to consider the bill.

Mr. McCONNELL. Mr. President, I ask unanimous consent that the bill be considered read a third time and passed and that the motion to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (H.R. 4803) was ordered to a third reading, was read the third time, and passed.

NEGRO LEAGUES BASEBALL CENTENNIAL COMMEMORATIVE COIN ACT

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Committee on Banking, Housing, and Urban Affairs be discharged from further consideration of S. 2321 and the Senate proceed to its immediate consideration.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (S. 2321) to require the Secretary of the Treasury to mint a coin in commemoration of the 100th anniversary of the establishment of Negro Leagues baseball.

There being no objection, the committee was discharged, and the Senate proceeded to consider the bill.

Mr. McConnell. I ask unanimous consent that the Blunt substitute amendment at the desk be considered and agreed to; that the bill, as amended, be considered read a third time and passed, and the motion to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment (No. 1523), in the nature of a substitute, was agreed to as follows:

(Purpose: In the nature of a substitute)

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Negro Leagues Baseball Centennial Commemorative Coin Act".

SEC. 2. FINDINGS.

The Congress finds the following:

- (1) The year 2020 marks the 100th anniversary of the establishment of the Negro National League, a professional baseball league formed in response to African-American players being banned from the major leagues.
- (2) On February 13, 1920, Andrew "Rube" Foster convened a meeting of 8 independent African-American baseball team owners at the Paseo YMCA in Kansas City, Missouri, to form a "league of their own," establishing the Negro National League, the first successful, organized professional African-American baseball league in the United States.
- (3) Soon, additional leagues formed in eastern and southern States.
- (4) The Negro Leagues would operate for 40 years until 1960
- (5) The story of the Negro Leagues is a story of strong-willed athletes who forged a glorious history in the midst of an inglorious era of segregation in the United States.
- (6) The passion of the Negro Leagues players for the "National Pastime" would not only change the game, but also the United States.
- (7) The creation of the Negro Leagues provided a playing field for more than 2,600 African-American and Hispanic baseball players to showcase their world-class baseball abilities
- (8) The Negro Leagues introduced an exciting brand of baseball that was in stark contrast to Major League Baseball.
- (9) A fast, aggressive style of play attracted black and white fans who sat together to watch those games at a time when it was virtually unheard of to interact socially in such a way.
- (10) Negro Leagues baseball would become a catalyst for economic development across the United States in major urban centers such as Kansas City, St. Louis, New York, Memphis, Baltimore, Washington, DC, Chicago, and Atlanta.
- (11) The Negro Leagues pioneered "Night Baseball" in 1930, 5 years before Major League Baseball, and would introduce gamechanging innovations such as shin guards and the batting helmet.
- (12) The Negro Leagues helped make the National Pastime a global game as players from the Negro Leagues—
- (A) were the first people from the United States to play in many Spanish-speaking countries; and
- (B) introduced professional baseball to the Japanese in 1927.
- (13) Jackie Robinson, a military veteran and former member of the Negro Leagues' Kansas City Monarchs, would break Major League Baseball's color barrier on April 15, 1947, with the Brooklyn Dodgers, paving the way for other African-American and Hispanic baseball players.
- (14) The Negro Leagues were born out of segregation yet would become a driving force for social change in the United States.
- (15) The Negro Leagues produced future Major League Baseball stars, including Leroy "Satchel" Paige, Larry Doby, Willie Mays, Henry Aaron, Ernie Banks, and Roy Campanella.

- (16) The Negro Leagues Baseball Museum was established in Kansas City, Missouri, in 1990—
- (A) to save from extinction a precious piece of Americana and baseball history; and
- (B) to use the many life lessons of the powerful story of triumph over adversity of Negro Leagues players to promote tolerance, diversity, and inclusion.
- (17) In 2006, Congress granted National Designation to the Negro Leagues Baseball Museum, recognizing it as "America's Home" for Negro Leagues baseball history.

SEC. 3. COIN SPECIFICATIONS.

- (a) DENOMINATIONS.—The Secretary of the Treasury (hereafter in this Act referred to as the "Secretary") shall mint and issue the following coins:
- (1) \$5 GOLD COINS.—Not more than 50,000 \$5 coins, which shall—
 - (A) weigh 8.359 grams;
 - (B) have a diameter of 0.850 inches; and
 - (C) contain not less than 90 percent gold.
- (2) \$1 SILVER COINS.—Not more than 400,000 \$1 coins, which shall—
 - (A) weigh 26.73 grams;
 - (B) have a diameter of 1.500 inches; and (C) contain not less than 90 percent silver.
- (3) HALF-DOLLAR CLAD COINS.—Not more than 400,000 half-dollar coins which shall—
- (A) weigh 11.34 grams;
- (B) have a diameter of 1.205 inches; and
- (C) be minted to the specifications for half-dollar coins contained in section 5112(b) of title 31, United States Code.
- (b) LEGAL TENDER.—The coins minted under this Act shall be legal tender, as provided in section 5103 of title 31, United States Code.
- (c) NUMISMATIC ITEMS.—For purposes of section 5134 of title 31, United States Code, all coins minted under this Act shall be considered to be numismatic items.

SEC. 4. DESIGNS OF COINS.

- (a) Design Requirements.—
- (1) IN GENERAL.—The designs of the coins minted under this Act shall be emblematic of the Negro Leagues Baseball Museum and its mission to promote tolerance, diversity, and inclusion.
- (2) DESIGNATION AND INSCRIPTIONS.—On each coin minted under this Act there shall be—
- (A) a designation of the value of the coin;
- (B) an inscription of the year "2022"; and
- (C) inscriptions of the words "Liberty", "In God We Trust", "United States of America", and "E Pluribus Unum".
- (b) SELECTION.—The designs for the coins minted under this Act shall be—
- (1) selected by the Secretary after consultation with the Negro Leagues Baseball Museum and the Commission of Fine Arts; and
- (2) reviewed by the Citizens Coinage Advisory Committee.

SEC. 5. ISSUANCE OF COINS.

- (a) QUALITY OF COINS.—Coins minted under this Act shall be issued in uncirculated and proof qualities.
- (b) MINT FACILITIES.—Only 1 facility of the United States Mint may be used to strike any particular quality of the coins minted under this Act.
- (c) PERIOD FOR ISSUANCE.—The Secretary may issue coins minted under this Act only during the 1-year period beginning on January 1, 2022.

SEC. 6. SALE OF COINS.

- (a) SALE PRICE.—The coins issued under this Act shall be sold by the Secretary at a price equal to the sum of—
- (1) the face value of the coins;
- (2) the surcharge provided in section 7(a) with respect to such coins; and
- (3) the cost of designing and issuing the coins (including labor, materials, dies, use of

- machinery, overhead expenses, marketing, and shipping).
- (b) BULK SALES.—The Secretary shall make bulk sales of the coins issued under this Act at a reasonable discount.
 - (c) Prepaid Orders.-
- (1) IN GENERAL.—The Secretary shall accept prepaid orders for the coins minted under this Act before the issuance of such coins
- (2) DISCOUNT.—Sale prices with respect to prepaid orders under paragraph (1) shall be at a reasonable discount.

SEC. 7. SURCHARGES.

- (a) IN GENERAL.—All sales of coins issued under this Act shall include a surcharge of—
 - (1) \$35 per coin for the \$5 coin;
 - (2) \$10 per coin for the \$1 coin; and
 - (3) \$5 per coin for the half-dollar coin.
- (b) DISTRIBUTION.—Subject to section 5134(f)(1) of title 31, United States Code, all surcharges received by the Secretary from the sale of coins issued under this Act shall be promptly paid by the Secretary to the Negro Leagues Baseball Museum for educational and outreach programs and exhibits
- (c) AUDITS.—The Negro Leagues Baseball Museum shall be subject to the audit requirements of section 5134(f)(2) of title 31, United States Code, with regard to the amounts received under subsection (b).
- (d) LIMITATION.—Notwithstanding subsection (a), no surcharge may be included with respect to the issuance under this Act of any coin during a calendar year if, as of the time of such issuance, the issuance of such coin would result in the number of commemorative coin programs issued during such year to exceed the annual 2 commemorative coin program issuance limitation under section 5112(m)(1) of title 31, United States Code (as in effect on the date of the enactment of this Act). The Secretary of the Treasury may issue guidance to carry out this subsection.

SEC. 8. FINANCIAL ASSURANCES.

The Secretary shall take such actions as may be necessary to ensure that—

- (1) minting and issuing coins under this Act will not result in any net cost to the United States Government; and
- (2) no funds, including applicable surcharges, are disbursed to any recipient designated in section 7 until the total cost of designing and issuing all of the coins authorized by this Act (including labor, materials, dies, use of machinery, overhead expenses, marketing, and shipping) is recovered by the United States Treasury, consistent with sections 5112(m) and 5134(f) of title 31, United States Code.

SEC. 9. MARKETING AND EDUCATIONAL CAMPAIGN.

The Secretary shall develop and execute a marketing, advertising, promotional, and educational program to promote the collecting of the coins authorized under this subsection.

The bill (S. 2321), as amended, was ordered to be engrossed for a third reading, was read the third time, and passed.

MAJOR MEDICAL FACILITY AUTHORIZATION ACT OF 2020

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Senate proceed to the immediate consideration of S. 3414.

The PRESIDING OFFICER. The clerk will report the bill by title.

The senior assistant legislative clerk read as follows:

A bill (S. 3414) to authorize major medical facility projects for the Department of Veterans Affairs for fiscal year 2020, and for other purposes.

There being no objection, the Senate proceeded to consider the bill.

Mr. McCONNELL. I ask unanimous consent that the bill be considered read a third time and passed and the motion to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (S. 3414) was ordered to be engrossed for a third reading, was read the third time, and passed as follows:

S. 3414

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 "Major Medical Facility Authorization Act of 2020".

SEC. 2. AUTHORIZATION OF MAJOR MEDICAL FA-CILITY PROJECTS OF DEPARTMENT OF VETERANS AFFAIRS FOR FISCAL YEAR 2020.

- (a) IN GENERAL.—The Secretary of Veterans Affairs may carry out the following major medical facility projects in fiscal year 2020 at the locations specified and in an amount for each project not to exceed the amount specified for such location:
- (1) Construction of an outpatient clinic and national cemetery in Alameda, California, in an amount not to exceed \$113,332,000.
- (2) Realignment and closure of the Livermore Campus in Livermore, California, in an amount not to exceed \$311,730,000.
- (3) Construction of a new medical facility in Louisville, Kentucky, in an amount not to exceed \$860,000,000.
- (4) Construction relating to flood recovery of the medical center in Manhattan, New York, in an amount not to exceed \$372.600.000.
- (5) Construction of a spinal cord injury building with a community living center, including a parking garage, in San Diego, California, in an amount not to exceed \$230.840,000.
- (6) Completion of construction of a medical facility project, including a parking garage, in San Juan, Puerto Rico, in an amount not to exceed \$307,000,000.
- (7) Construction of a new critical care center in West Los Angeles, California, in an amount not to exceed \$75,790,000.
- (b) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated to the Secretary of Veterans Affairs for fiscal year 2020 or the year in which funds are appropriated for the Construction, Major Projects account, \$2,271,292,000 for the projects authorized in subsection (a).

NATIONAL SLAM THE SCAM DAY

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Sen-

ate proceed to the consideration of S. Res. 535, submitted earlier today.

The PRESIDING OFFICER. The clerk will report the resolution by title.

The senior assistant legislative clerk read as follows:

A resolution (S. Res. 535) designating March 5, 2020, as "National 'Slam the Scam' Day" to raise awareness about the increasing number of government imposter scams, to encourage the implementation of policies to prevent government imposter scams, and to encourage the improvement of protections from government imposter scams for the people of the United States.

There being no objection, the Senate proceeded to consider the resolution.

Mr. McCONNELL. I ask unanimous consent that the resolution be agreed to, the preamble be agreed to, and the motions to reconsider be considered made and laid upon the table with no intervening action or debate.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 535) was agreed to.

The preamble was agreed to.

(The resolution, with its preamble, is printed in today's RECORD under "Submitted Resolutions.")

ORDERS FOR MONDAY, MARCH 9, 2020

Mr. McCONNELL. Mr. President, I ask unanimous consent that when the Senate completes its business today, it adjourn until 3 p.m., Monday, March 9; further, that following the prayer and pledge, the morning hour be deemed expired, the Journal of proceedings be approved to date, the time for the two leaders be reserved for their use later in the day, and morning business be closed; further, that following leader remarks, the Senate resume consideration of S. 2657; further, that notwithstanding rule XXII, the cloture motions filed during today's session of the Senate ripen at 5:30 p.m., Monday, March, 9, and that the mandatory quorums under rule XXII be waived; finally, that the first-degree filing deadline with respect to the cloture motions filed during today's session be at 3:30 p.m.

The PRESIDING OFFICER. Without objection, it is so ordered.

ADJOURNMENT UNTIL MONDAY, MARCH 9, 2020, AT 3 P.M.

Mr. McCONNELL. Mr. President, if there is no further business to come before the Senate, I ask unanimous consent that it stand adjourned under the previous order.

There being no objection, the Senate, at 4:58 p.m., adjourned until Monday, March 9, 2020, at 3 p.m.

NOMINATIONS

Executive nominations received by the Senate:

DEPARTMENT OF STATE

KATHERINE CAMILLE HENDERSON, OF TENNESSEE, FOR THE RANK OF AMBASSADOR DURING HER TENURE OF SERVICE AS CHIEF OF PROTOCOL.

IN THE ARMY

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES ARMY TO THE GRADE INDICATED WHILE ASSIGNED TO A POSITION OF IMPORTANCE AND RESPONSIBILITY UNDER TITLE $10, \, \text{U.s.c.}$, Section 601:

To be lieutenant general

MAJ. GEN. FLEM B. WALKER, JR.

IN THE NAVY

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED WHILE ASSIGNED TO A POSITION OF IMPORTANCE AND RESPONSIBILITY UNDER TITLE 10, U.S.C., SECTION 601:

To be vice admiral

REAR ADM. STEPHEN T. KOEHLER

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED WHILE ASSIGNED TO A POSITION OF IMPORTANCE AND RESPONSIBILITY UNDER TITLE 10, U.S.C., SECTION 601:

To be vice admiral

REAR ADM. WILLIAM J. GALINIS

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED WHILE ASSIGNED TO A POSITION OF IMPORTANCE AND RESPONSIBILITY UNDER TITLE 10, U.S.C., SECTION 601:

To be vice admiral

VICE ADM. ROSS A. MYERS

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED WHILE ASSIGNED TO A POSITION OF IMPORTANCE AND RESPONSIBILITY UNDER TITLE 10, U.S.C., SECTION 601:

To be vice admiral

REAR ADM. JEFFREY E. TRUSSLER

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED WHILE ASSIGNED TO A POSITION OF IMPORTANCE AND RESPONSIBILITY UNDER TITLE 10, U.S.C., SECTION 601:

To be vice admiral

REAR ADM. ROY I. KITCHENER

WITHDRAWAL

Executive Message transmitted by the President to the Senate on March 5, 2020 withdrawing from further Senate consideration the following nomination:

KATHERINE CAMILLE HENDERSON, OF TENNESSEE, TO BE CHIEF OF PROTOCOL, AND TO HAVE THE RANK OF AMBASSADOR DURING HER TENURE OF SERVICE, VICE SEAN P. LAWLER, RESIGNED, WHICH WAS SENT TO THE SENATE ON FEBRUARY 27, 2020.