ENERGY POLICY MODERNIZATION ACT OF 2015

The PRESIDING OFFICER. Under the previous order, the Senate will proceed to the consideration of S. 2012, which the clerk will report.

The legislative clerk read as follows: A bill (S. 2012) to provide for the modernization of the energy policy of the United States, and for other purposes.

The PRESIDING OFFICER. Under the previous order, the time until 2:15 p.m. will be for debate only.

The Senator from the great State of Alaska.

Ms. MURKOWSKI. Mr. President, it is good to welcome the Presiding Officer back to Washington, DC. This Senator knows that the Presiding Officer was back home in Alaska, and while they may not have had snow, they got everybody else's attention with a 7.1 earthquake. I know it was an interesting weekend for the Presiding Officer as well.

Mr. President, I am on the Senate floor this morning with a fair amount of excitement and enthusiasm. We are beginning the debate on energy reform legislation, S. 2012, the Energy Policy Modernization Act. This is the first time the Senate has debated energy policy reform in more than 8 years. It has been more than 8 years since we have had this kind of debate.

I was here yesterday morning and had an opportunity to open the session. I opened the session and Senator Collins was the Presiding Officer in the chair. It was one of those interesting mornings where everybody else seemed to be female on the floor, and the press has taken note of that. But that is not my point.

I left the floor and went out in the hallway where there was a group of eight or nine young kids with a fellow who works on the House side. I think he was giving them a little bit of a field trip, but I think he had kid duty because so many schools were still closed on account of the incredible amount of snow we got in Washington. I had a fabulous conversation with the kids who at that age are excited about being in the Capitol and understanding the difference between a House Member and a Senate Member.

They asked: Well, what are you working on?

I said: It is really exciting because we are going to be taking up energy reform legislation that we have not done in a long time.

I asked the kids when they were born, and one little girl said 2007. I said that 2007 was the last time we had energy legislation on the floor.

And since it sometimes helps to understand the passage of time in relation to our kids I said: Look what has happened to you in the 8 years since you were born. You have grown, gotten smarter, and been exposed to a lot of things.

Debate on energy legislation is long overdue on the floor of this Senate. This is a good bill, it is a timely bill, and it is a bipartisan bill. It deserves overwhelming support from this Chamber. I was encouraged by the minority leader's comments and his encouragement that through the process that we have built on the energy committee to move out a bipartisan bill, it should enjoy the respect of good debate as we move forward to again attempt to modernize our energy policies.

At the beginning, I acknowledge the good and strong and very cooperative work I have received from my ranking member Senator CANTWELL from the State of Washington and thank her for helping me craft this bill because it was truly a joint effort. It was a very collaborative effort. I also thank the other members of the Senate Energy and Natural Resources Committee for all the ideas they brought to bear and the support we have received from them bringing the bill to this point.

To give folks a little bit of a background on how we came to have this Energy bill—the first real substantive legislation we have had here in 2016—it is worthwhile to talk about the process of how we got it because that in and of itself is a little bit unusual nowadays.

To segue just a moment, because it was last year at this time that Senator Cantwell and I were managing the floor when we had the Keystone XL debate. It was the first time in a long time we had seen regular order with a full-on amendment process. A lot of people did not even know how to process these amendments. We worked through some 40-odd amendments, and got everybody's attention that we can actually move a bill. It had some level of controversy. We did not obviously agree with many aspects of it, but we moved through a process.

Well, it is January again, and the women are back at work. I am hopeful the collaborative effort that got this bipartisan bill to the floor today will be reflected in the debate that goes forward. Senator CANTWELL and I sat down last January, when I became the chairman of the committee, and we talked about goals and priorities—what we were looking for. We both said it was well past time to update our energy policies, to do a scrub, to do an overhaul. We had a conversation about how we might go about it because there were a couple of ways we could proceed. I could have drafted my own bill with my own priorities and tried to get the votes that I needed to move it out of committee, but if you do not have the support beyond your side of the aisle, it is going to be tough to be able to advance it to the floor and get it enacted into law. Senator Cantwell could have done the same. She could have moved her own bill. We could have done messaging bills, but we both agreed we are well past the time for messaging. We need to be legislating and governing in the energy space, and in order to do it, it is going to take some cooperation, collaboration, and conversation. That is where we started.

I went around to colleagues on the committee and began conversations

with them about their energy-related priorities. These conversations continued between our staffs. Our staffs also held dozens of bipartisan listening sessions with stakeholders. We held them in Washington, DC. We held them in other parts of the country. We held one hearing in Kwigillingok, AK. The Presiding Officer knows where that is. Most others know it as only some faraway village in Alaska, but I mention this as it speaks to the level of outreach for which we strived.

After our listening sessions, we came back and really rolled up our sleeves. We held four oversight hearings and began with a 30,000-foot-look about where we are in different energy spaces. We had our oversight hearings.

Then we moved down to six legislative hearings on a total of 114 different bills. These were 114 different bills that were not necessarily introduced by just Members of the energy committee. These were bills that were introduced Republicans and Democrats throughout the Senate and some House Members' bills that we had seen as well. We took the testimony that we received from experts, advocates, private citizens, administration officials, and from our home States and just about every other State. We gathered all the perspectives that we could about what Congress should do and what Congress needs to do to ensure that our Federal policies keep up with the years of change in energy markets and energy technologies.

One simple case in point that reminds us of this 8-year passage of time is this. Eight years ago when we talked about LNG, what we were talking about was seeing if we could structure our LNG terminals so they could be import terminals. Think about where we are now. We are talking about how we export our LNG, how we can move it to share our energy wealth with others. That is a prime example of making sure that what is happening within our energy markets, what is happening within our energy technologies is consistent with what our policies, our laws, and our regulations allow.

After we did all this gathering of information, we entered weeks of bipartisan negotiations to determine which bills should be incorporated into our draft text. From the 114 measures, we took 50 different bills. As one flips through the 400-some-odd pages of this Energy Policy Modernization Act, you will see bits and pieces of 50 different measures offered by colleagues—Republicans and Democrats—offered throughout the Senate.

Senator PORTMAN and Senator SHA-HEEN have been leaders on energy efficiency and we were able to incorporate a number of ideas in the energy efficiency title of our bill. You will also see incorporated in it the critical minerals bill that I have been working on for years now. Again, we are not just taking the ideas from this Senator from Alaska or the Senator from Washington and introducing a bill for consideration, we have solicited others for ideas and input as well.

The last step on the committee was when we went to markup. We held 3 days of markup, which is a pretty good time to spend in committee. We dispensed with nearly 59 amendments and because of that very collaborative process we solicited ideas from all sides. When it came to reporting the bill out of committee we ended up passing it out by a significant 18-to-4 vote. We agreed to report the Energy bill to the full Senate for further consideration, and that is how we got to where we are today.

I wish I could say we would see more of this type of collaborative effort in the Senate. We do not see this all the time. We did see it last year, and where we have seen legislative success is worth noting.

The Education bill that was shepherded by Senator Alexander and Senator Murray was also a very collaborative process. I serve on the HELP Committee. I sat through the many hours of debate and oversight and markups. We were able to advance that bipartisan bill to the floor—a bill that moved out of the committee unanimously—and we were able to advance it to the floor where it enjoyed strong bipartisan support, went to conference with the House, and has now been signed into law.

Another area where the leaders worked cooperatively and collaboratively—I commend Senator BOXER and Senator INHOFE for what they did on the highway bill. They worked through the issues that were not easy but were absolutely necessary to get a longer term highway transportation bill. That does not happen if you just elbow your way through. It comes when you work together. I think we have demonstrated on the energy committee that we have done just that—working collaboratively.

I have said many times that the Energy Policy Modernization Act is not the bill I would have drafted if it were just up to me, and it is not the bill Senator Cantwell would have drafted if it were just up to her. The bill is not exactly the way any one of us would have drafted it if it was up to just one of us. It is a bill we wrote together. We wrote it as a committee. We wrote it as a team and as a group of 22 Senators who care very deeply about our Nation's energy policies.

As Members are coming back, as they are looking at this bill, I urge them to look at what is in the bill and where we have been able to find the common ground. Look and analyze that because I can guarantee you are going to find things that are not in there that you wish were there and you are going to say: Lisa, how come my X, Y, or Z is not part of this bill?

That is true. There is some X, Y, and Z that is not in this bill that I would really like. I know there are items the

Presiding Officer would really like—the two of us being Senators from Alaska—but we do not have then opportunity to build a consensus on some of those issues right here, right now. So can we agree that what we have built with this bill advances our energy policies, brings us more up to speed, and loosens the choke hold we have in certain areas?

We spent months modernizing our energy policies and addressing both opportunities and challenges, and we found common ground in many areas. I think we found common ground in more areas than we actually expected when we started this process—certainly enough to write a good, solid bill. We ultimately organized our efforts into five main titles. We have efficiency, infrastructure, supply, accountability, and conservation.

We agreed to include the Energy Savings and Industrial Competitiveness Act. This is the efficiency measure which I mentioned just a moment ago which Senator PORTMAN and Senator SHAHEEN have been leading for years. I think it is very important that we were able to incorporate the good work of the Senators from Ohio and New Hampshire, along with the support of 13 other Members, for inclusion in this bill

We also agreed to include the LNG Permitting Certainty and Transparency Act. This act was led by Senator Barrasso, and 17 other Members joined with him on that very important measure.

We agreed to include my American Mineral Security Act. which is the critical minerals bill sponsored by Senator RISCH of Idaho, Senator CRAPO of Idaho, and Senator HELLER of Nevada. Again, it is a piece that I think many would agree is vitally important. Having greater control of these important minerals is critical to our country's energy security and we must not subject ourselves to complete reliance on others as sources for their supply. We do not want to go down the same road we have been down, for instance, with oil historically when we are talking about our critical minerals. This is a huge issue for us.

We agreed to promote the use of clean, renewable hydropower, which is a priority for Members from Western States, including Senator GARDNER, who helped lead, Senator DAINES, Senator CANTWELL, and me.

We agreed to expedite the permitting of natural gas pipelines without sacrificing any environmental review or public participation. This was an effort that was led by Senator CAPITO of West Virginia.

We agreed to a new pilot program for oil and gas permitting. This was one of many good ideas Senator HOEVEN of North Dakota advanced.

We took up a proposal from Senator COLLINS of Maine to boost efficiency within our schools. I think we all recognize this is an area where we can and should try to do a little bit more. It saves us in the long run.

Senator KLOBUCHAR of Minnesota had a measure to increase the efficiency of buildings that are owned by nonprofits.

We agreed to improve our Nation's cyber security—an issue we are all very keyed in on. This was from legislation that was originally presented by Senator RISCH of Idaho and Senator HEINRICH of New Mexico. We saw an amendment from Senator FLAKE on this topic as well

We made innovation a key priority in our bill, with a recognition that there is a limited but very useful role for the Federal Government to play early on in the development of new technologies.

I just came from a meeting this morning, a summit on advanced nuclear technologies. We spent a good part of the summit recognizing that when you talk about nuclear and the future, innovation is key to what we are building.

We agreed to reauthorize many of the energy-related portions of the America COMPETES Act. You will recall that this was the measure Senator ALEXANDER has advanced in the past. We took those energy-related pieces and incorporated them in the bill.

In some of the areas of renewable, geothermal is one that I believe has enormous potential. We certainly have that potential in the State of Alaska, but we also have it in other Western States. This was a big priority for Senator Wyden and Senator Heller. Senator Wyden's legislation and the ideas he has advanced have been key.

We agreed to promote vehicle innovation. This was a priority for Senator Peters of Michigan, Senator Stabenow of Michigan, and Senator Alexander of Tennessee so we were able to enhance that discussion on vehicle innovation.

We agreed to renew the coal R&D program at the Department of Energy. This was based on a proposal that was advanced by the Senators from West Virginia, Senator Manchin and Senator Capito, but Senator Portman was also key to helping advance this.

We agreed to help protect reliability within the electric sector—an incredibly important part of what we do within this legislation.

We reform the Loan Guarantee Program at the Department of Energy. Many of us believe strongly that reforms were necessary, and we have done just that to ensure that we do not have taxpayers at risk with certain aspects of that program.

We agreed to reauthorize the Land and Water Conservation Fund. As folks will recall, that authorization expired toward the end of last year. Within the omnibus, we successfully advanced a 3-year extension, but what we did within the committee was we advanced permanent authorization of LWCF with some reforms—reforms that were endorsed by the full committee.

We have a provision in there as well that helps to address the maintenance backlog within our national park system. People understand that this year is the 100th anniversary of the National Park Service. It is something worthy of celebration. Unfortunately, we have a real black eve when it comes to maintenance and upkeep of our parks, so we have reviewed that issue and said we need to make steps to help address that in a way that is constructive.

There is a section of the bill nobody will talk about. The press does not care to report about it, but I think it is a very good section. Recognizing the Presiding Officer's interest in regulatory reform, he will be pleased to know we cleaned up the United States Code. We delete dozens of provisions within the Code that are either obsolete or duplicative. We get these programs on the books, we put requirements for a study into law, and as long as they are still there—even though no one is reading that report anymore, even though those programs are now obsolete because of what has gone on, they are still on the books. So if you are worried about government spending and you are looking at the conservative reason to embrace what we are doing, take a look at some of the provisions we got rid of. They are old, they are outdated, and they are obsolete.

This is just a sample of the good work we have included within the bipartisan bill.

Many of the Members I listed are responsible for not just one provision but for multiple provisions throughout the bill. It was truly a team effort as we worked this through. We were counting up different parts of the bill on which we have seen Members contribute, and more than half of the Members of this Senate are sponsors or cosponsors of at least one provision in the bill as we stand here today. Again, I think that is representative of the process in which Senator Cantwell and I have engaged.

You may say: OK, you had a very thorough process. What is in it? What good is it? What does it mean to me? How is this going to help our country from an energy policy perspective? How is it going to make sure that when we talk about energy security translating into economic security and national security-how does this all bind together? What does this do? How does this help our people?

There are many practical benefits to modernizing our energy policy, and I will start with the first obvious one. Every time you do upgrades, whether within your house or your business, you become more efficient. For example, we recently replaced the windows in our house. Not only did it make the house look a little bit better, but we are paying less on utility bills. My husband just found a good deal on LEDs, and he replaced all the lightbulbs in the house. He is all excited about it because it is going to reduce his costs. He is worried about costs. We should all be worried about costs. This bill helps us reduce our costs.

This bill also allows us a cleaner energy future because when you modernize your infrastructure, when you

use less, you reduce much of your emissions. So for those who will be critical and say "By gosh, you didn't fix the issue of climate change," look through this bill and tell me it does not make for a cleaner energy future for this country.

This bill helps us to produce more energy and to be less reliant on others. It helps Americans save energy. Again, when we save energy, we save money and there is a more efficient environment. It will help ensure that our energy can be transported from where it is produced to where it is needed. That is a big challenge we have nowadays. It will bolster our status as the most innovative Nation in the world. Why shouldn't we be the most innovative Nation in the world when it comes to energy? We have the resources here. Let us develop the technologies that will allow us to access them in a way that is responsible, with good environmental stewardship, that creates jobs, that creates economic opportunities, and that truly allows us to be more energy-resilient. Why shouldn't we be the innovators and the leaders? Let us not cede that to anyone.

Our bill will allow manufacturers to thrive without the fear of high costs or crippling shortages, and it will cement our status as a global energy superpower as we provide a share of our surplus to our allies and trading partners. Is not that a nice thing to know, that not only can our energy be good for us and for America, it can be good from a geopolitical perspective? That we can help our friends and allies?

When you think about the energy security, the economic security, and the national security that come with energy, that is where it all knits together. The Energy Policy Modernization Act will boost our economy, our security, and our international competitiveness all at the same time. It will help our families save money. It will help our businesses save hundreds of billions of dollars. It frees up budgets. It frees up our ability to place priorities elsewhere. It will help assure that our energy remains abundant and affordable, even as it becomes cleaner and more diverse in supply. And it will do all of this without raising taxes. without imposing new mandates, and without adding to the Federal deficit.

Again, we are getting great gains for our economy, good jobs, and security from a host of different ways. We are able to do this without raising taxes. without imposing new mandates, and without adding to the Federal deficit.

This is a good bill. This is a bill that is designed to go the distance. It is designed to make a difference. I am confident that we can proceed through this floor debate, and we can make it even better. For the half of the Senators who have participated in this one way or another, there is another half who want to weigh in, and I welcome that. I think that is part of this process. This is part of a commitment we are making to an open amendment process,

but I hope we can focus on the good that is within this bill and work to make it better and avoid the gotchas and avoid the poison pills; avoid those things that are designed to do nothing more than to bring a bill down by perhaps making a political point. I ask my colleagues to treat this bill on the floor with the same seriousness that the Energy and Natural Resources Committee treated it throughout this month-long process. Let us come together as Senators in the United States Senate to truly help make a difference with our energy policies.

With that, I encourage Members to come down to the floor. We know there are a bunch of rumored amendments out there, and we welcome them. But we all know we have been delayed a couple of days by the snow, and we have work to do. So I would urge colleagues to come to the floor and file their amendments. I would also remind Members that if an amendment costs money, it is going to need to be paired with a viable offset.

I remind the Senate that we are considering Senate bill 2012. This is not a House shell. So we will need to table any tax amendments because we do not want to be in a situation where we have a blue slip that prevents us from advancing to conference. I am throwing that out there. You may have issues that you would like to bring up, but if it costs money, we have to have an offset. We simply cannot do tax amendments, and I know that because there are actually some that I am interested in as well.

I think Senator CANTWELL and I are both in the same situation. We know an open amendment process on an energy bill that hasn't seen floor action in a long time could have the effect of unkinking the hose. We know there are a lot of folks that have a lot of good ideas, and perhaps hundreds of ideas, that this bill could include. Our intent is to work as hard as we can and as fast as we can to process as many of these bills as possible.

Tomorrow we expect to have a busy day. Hopefully, by the end of today, we will have reached some consent agreement as to what the votes for tomorrow would look like, but my hope is that we will be voting, voting, voting tomorrow so as to process the many of the amendments we are expecting. It is unfortunate that we have lost a few working days to the snowstorm, but that is nothing compared to the 8 years we have lost as we have let our energy policies languish.

We know we are in a place and a space where our policies have failed to keep up with the changes in the market and the advances in technology. We know our policies in many areas are outdated, with opportunities being igand challenges nored going unaddressed. So we are here. It is time to have the debate. It is time to work through an amendment process. It is time to pass an energy bill in the U.S. Senate. And after the model of the

highway bill, of the education reform, and the very good work that so many in this body have put toward this bipartisan effort, my hope is that the Energy Policy Modernization Act will be the next bipartisan accomplishment on behalf of the American people.

Mr. President, I yield to my ranking member and good partner in all things energy, Senator Cantwell. A very sincere thank-you to her for a very cooperative and good working relationship throughout all of this. Thank you.

The PRESIDING OFFICER. The Senator from Washington.

Ms. CANTWELL. Mr. President, I, too, rise this morning to talk about the Energy Policy Modernization Act of 2015. Yes, sometimes we can be cynical about this place and what we can get done; then, all of a sudden, we have a great opportunity to move something forward.

The Senator from Alaska said it correctly. This is a milestone for the Senate. The fact that we are considering energy policy legislation on the Senate floor in a bipartisan bill, or any bill, for the first time since 2007 is a tremendous milestone. I thank her for her leadership and for her time and effort to put this legislation together in such a bipartisan fashion through the processes that we went through shown on that chart—hearings, listening sessions, discussions, amendments.

I think it is appropriate to thank our staffs. Usually that is done at the end of a process, but when we have had a bill on the floor for the first time since 2007, we should herald them in advance. Angela Becker-Dippmann, Colin Hayes, and I know Karen also played a big role in this, so I thank them.

But my colleague is a partner, as she said, in all things energy. It is interesting that the other Senator from Alaska is presiding at this moment. We have all been working together. The Senator from Alaska, Ms. MURKOWSKI, and I participated in an Arctic summit just last week in Seattle, focusing on another policy for our Nation-the urgency of getting an icebreaker fleet for the United States of America and the other policies we need to do in the Arctic. So I have certainly enjoyed the many efforts that we in the Pacific Northwest region focus on. I think maybe that helped us a little bit in our outlook. It is not that we agree on everything. Certainly, we don't. But I think we know where we disagree, and we try not to let that get us held up. We try to find the commonality in what we are doing in moving forward on the modernization of our energy system and to make sure we are empowering the private sector to continue to move ahead on things by making sure that either the R&D investments or changes in policy get done on our watch. That is really what the Energy Policy Modernization Act is about.

I thank the Chair for her leadership on that effort and for steering us to this process that we have before us today. As she said, it is not a bill so perfect that we are not going to hear from our colleagues on it. Since it is the first major piece of energy legislation in a long time that we hope goes all the way to the President's desk, it is a process I am sure many of our colleagues are going to want to see amendments on. We will work through them to the best of our abilities to hopefully improve the bill, but also not sink the bill with poison pill amendments that we know either will get it vetoed or will not get it across the finish line where we need to take this legislation.

I am here this morning, along with the Chair of the committee, to thank our colleagues on the committee on both sides of the aisle for their leadership and input on this bill. Again, it was a process on which not everybody agreed, but the bill passed out of committee with well over a majority of votes in a bipartisan way. I think that signals it should have good support here on the Senate floor because we went through a very deliberative process in the committee, and that deliberative process means a lot of issues were aired, and we know where we can go and where we can't go on this legislation.

Again, it doesn't mean we are not willing to consider a lot of debate; we are. It doesn't mean people aren't going to offer amendments that are going to be challenging; they are. But in the end, I think if we want to keep moving forward with empowering the kind of energy revolution that we are seeing, we need to keep up on our side of the ledger here in the Nation's Capital.

Much has changed in the last 9 years since the 2007 act. Before that, we had a small bill in 2005, so we have seen some very dramatic changes in energy. Clean energy has certainly weathered the storm and is not just a pipe dream anymore. It is a key driver of our economy, and it is helping us reduce our carbon emissions. Wind power has more than quadrupled since the last bill. Solar photovoltaic installations are up nearly 15 times. The number of LED lights-I am glad the Senator from Alaska's husband is such a cheerleader—has grown more than 90 times in since that bill. The reason is, just as the Senator from Alaska said, this is all about consumers who want to be able to save money on their energy costs. Senators from Alaska get that, and Senators from Washington get that as well. We get it in a different way. They get it because they are constantly battling the highest energy costs in the Nation, and we get it because we are constantly reaping the benefits from some of the lowest energy costs in the Nation.

We both have a great deal of concern here. We both want to protect the industries and the economic opportunities of our economy. We know that energy is the lifeblood of any economy.

The U.S. solar industry employed more than 200,000 Americans in 2015,

which was a 20 percent growth in the industry in the last year. To put it into perspective, it has grown nearly 12 times faster than the national employment rate during that same time period. So we need to continue this effort to make investments in the right research and development, the right technologies, in order to empower homeowners, ratepayers, and even businesses to save billions of dollars in energy costs.

Why are we doing this bill? As I said, it is an important journey to update our antiquated energy policies when we want to modernize our infrastructure, and we want to maintain our global competitiveness. These are issues that are part of our energy debate today because we also want to reduce carbon pollution. As my colleague said, while this bill may not have everything we want to see from our side of the aisle in a carbon reduction plan, it certainly shows that we do want to see investments in clean energy.

It doesn't matter whether you are a Republican or Democrat, the people of this country have said clearly that they want to see clean energy and they want us to help curb climate change. We need to listen to our constituents, and that is why we are trying to move past some of the issues of policy and move forward on things that will empower our citizens.

The Senator from the State of Iowa, who is here, understands exactly what I am talking about because he, too—whether it is in wind or solar or biofuels—has seen the economic benefits of a changing energy landscape for our economy and wants to make sure that businesses and ratepayers are still empowered.

We are here because we need to update and modernize our energy policies. That is what we did when this bill came out of committee with an 18-to-4 vote. And we need to build on the momentum of the technologies and how their deployment reflect new market realities. A very important aspect of our energy debate is the Secretary of Energy's completion of what was called the Quadrennial Energy Review.

What are our Nation's energy challenges? It wasn't just an Energy Department discussion. It was the entire Federal Government weighing in on what are the energy needs of our Nation. It is done every 4 years. Basically, what Secretary Moniz said in that report is that we are at a crossroads, that the dynamic and changing nature of our domestic resource mix, expanded supplies of natural gas, and growth in distributed generation are creating opportunities and challenges.

As the Secretary put it, "the longevity and high capital costs of energy infrastructure mean that decisions made today will strongly influence our energy mix for the considerable part of the 21st century."

What was he talking about? He was talking about the fact that we are at a crossroads and where we make investments will mean that we will either

reap the benefits of making the right decisions or stymie our economy's economic growth by not making the right energy decisions.

When we talk about energy infrastructure, I try to remind my colleagues we are talking about 2.6 million miles of pipeline, 640,000 miles of transmission lines, 414 natural gas storage facilities, 330 ports with petroleum and crude, more than 140,000 miles of railroad, and a diverse mix of energy projects and obviously an electricity grid that runs from coast to coast.

The Quadrennial Energy Review talked about how we needed to modernize and upgrade that infrastructure and that the electricity grid was a key part of that. That is why you will see a lot in this bill about modernizing the electricity grid and why it is so important to our Nation—not only from an economic perspective of having affordable, cheap, renewable, clean energy but also in making sure we modernize the grid to help us with cyber security.

Once again, a quote from the report: Dramatic changes in the U.S. energy landscape have significant implications for . . infrastructure needs and choices. Well-informed and forward-looking decisions that lead to a more robust and resilient infrastructure can enable substantial new economic, consumer service, climate protection, and system reliability benefits.

That is why you will see a significant focus in this bill on infrastructure, investing in technologies, cyber security, and making our grid more intelligent, efficient, and resilient—ways that we believe are going to help both businesses and consumers

The bill includes investments in energy storage, which helps integrate renewable energy. It has provisions for advanced grid technologies, which help make our electricity grid smarter and more intelligent, to move energy around more efficiently. It has cyber security research and development. I don't think there will be anybody in the Senate who will not support this more robust effort on cyber security given the challenges and the threats we face.

It has a focus on new renewable technologies, which are great break-throughs in helping to drive down costs. It has energy efficiency, which costs basically one-third to one-half less than new generation.

This chart shows the question of whether you want to pay 4.6 cents a kilowatt for production or 12 cents a kilowatt for production. I know this. I would rather pay 4.6 cents. I would rather drive the costs down for the consumer as a result of energy efficiency or renewable energy, as opposed to making investments in what we know is going to be more expensive energy for the future.

When it comes to R&D, we need to make sure we are making the right investments for the future and that we are sending the signals that capital markets will take as also a signal for continued investment.

We need to make investments in our workforce because as the Quadrennial Energy Review shows, we will need 1.5 million new workers by 2030 in the energy sector. That is a huge number. I will say that we do not have the right tools in place to quickly train as many people as necessary.

I am sure the Presiding Officer would attest to this just in the biofuels area. I am sure there are institutions in her State that are working hard to help describe, train, and educate those in the biofuels areas so we can have a robust infrastructure—the science, the R&D, the distribution, all of that. I know in our State we are working hard on this with our national laboratories and Washington State University on getting an advanced biofuels for the airplane sector because we want aviation to move forward on using those fuels and becoming even more efficient.

There is advanced manufacturing here where it is about making sure our trucks have the same efficiency opportunities that we were able to help usher through in 2007 with higher fuel efficiency standards for automobiles. Now we want to make sure we are investing in the same level of R&D for our advanced truck fleets in the United States so they can reap the same benefits as fuel-efficient automobiles.

As I mentioned, the Quadrennial Energy Review laid all of this out, and that is why we took an effort with the committee on hearings that my colleague already outlined with more than 100 different energy bills and a variety of input from our colleagues.

Yes, energy efficiency is front and center in this debate. In fact, I think there were 22 different energy efficiency bills from 30 different Senators as sponsors and cosponsors in the discussion. I think in 2007 we definitely talked about some smart grid demonstration projects and a few things, but nowhere was energy efficiency or the development of these policies whether it is storage or distributed generation or protecting ratepayersnone of them were as front and center as they have been in this debate today. That is because energy efficiency not only makes sense in terms of the environmental benefits. People have seen that it makes sense for the economy, and it makes sense for our consumers. As I said, it drives down the cost of production and, obviously, when it integrates more sustainable resources, efficiency becomes a cheaper, better job creator and carries lower environmental costs than the alternative. Not only does it save consumers money, but it helps add to the flexibility of our grid and reduces carbon.

I want to thank a few of our colleagues who have worked so hard on helping us put this legislation together. My colleague from Alaska mentioned the Shaheen-Portman piece of legislation, which is a key cornerstone of this bill when it comes to the energy efficiency area. It encompasses much of their work. They have obviously

been stalwarts for years trying to get energy efficiency legislation moved through the Senate. Many of the provisions they have sought in the past are now in this bill. I commend them for their efforts.

Residential and commercial buildings consume 40 percent of our U.S. energy. That is roughly \$430 billion. When you talk about focusing on making our buildings more efficient and addressing that sector of our energy needs, there are some true savings.

In the past, energy buildings and equipment standards have lowered the costs, and they expected to save roughly 3 billion metric tons of carbon emissions, which is the equivalent of carbon emissions of 42 million vehicles in a 15year period. Just by focusing on our buildings and making them more energy efficient, we can have a tremendous impact. That is why I worked with my colleague Senator Murkowski in authorizing a section of this bill on smart buildings, and Senator WARREN joined us. Smart buildings really will help us manage our energy loads better, particularly focusing on lighting, heating, cooling systems, and communications between buildings. We heard from the Department of Energy that smart buildings really could be a game changer for the efficiency discussions. I thank my colleague from Alaska for working with me on that provision.

DOE has estimated that smart buildings can result in 30-percent additional efficiency in the way buildings are operated when they realize the full potential of these technologies. You can imagine that if you are an industry and you are trying to be competitive, what that is going to mean to have that level of efficiency. I know because with every sector of economy, they are constantly focusing on energy costs as a way to be competitive, particularly in an international market. I would say that one of the reasons we have so many server farms in the State of Washington-that is, storage data facilities—is because we have cheap electricity. When you start saying you are going to drive down the cost of electricity by such a significant margin, people are saying, "I want to locate there."

We want to make sure we are empowering free capital and investments to help us reduce carbon emissions by focusing on giving those powers to help focus on smart buildings. This isn't just a U.S. strategy. This is something the United States could be world leaders in. The International Energy Agency says that the energy efficiency market in China alone is expected to total more than \$1.5 trillion between now and 2035. Think about it. They are building so rapidly, and yet they could be incented—that is, by the level of investment the United States is already making—to further their own efforts in smarter buildings, reducing carbon, building more efficiently. This is something where U.S. solutions could aid. I hope we will continue to focus on these

kinds of innovations in the U.S. agreement with China.

My colleague mentioned infrastructure as a key theme of this bill and mentioned some of those provisions. As I mentioned, utilities and the fact that, on average, the United States spends nearly 29 percent of its total expenditures on utilities such as electricity and natural gas—we want to continue to make improvements there. Datadriven intensive industries also, as I mentioned a few minutes ago, are part of the equation. We know as they continue to grow, we are going to want to make continued investments.

In the Pacific Northwest, the Bullitt Center, which has been an acclaimed building—probably one of the greenest commercial buildings in the entire world—is a net-zero building and shows how well you can build a building that both consumes less electricity and can actually put electricity back onto the grid.

We have many of these efforts in the Pacific Northwest where people have seen that smart building technology is expected to grow from \$7 billion now to \$17 billion in the next 4 years. It is a tremendous market opportunity for U.S. technology.

I wish to mention a couple of other provisions that our colleagues have worked on in the bill and thank them for that. I wish to thank Senator FRANKEN, Senator HEINRICH, Senator KING, and Senator HIRONO for their efforts on energy storage that we have included in this legislation. It includes a program that is focused on driving down the cost curve of ways to help with storing energy, whether you are talking about battery technology or large-scale storage. I also thank Senator Wyden, Senator King, and Senator HIRONO for their focus on advanced grid technologies—that includes demonstrating how multiple new technologies can be put into the electricity grid on a micro level. This is so important. My colleague from Alaska and my colleague from Hawaii both see the challenges of very different energy mixes than the rest of the United States and the challenges with transportation. Helping them on micro grid issues is critically important.

As I mentioned, making distributed generation more reliable and more intelligent is a very key factor in this bill. Senator WYDEN did incredible work on making sure we added new renewables in the area of marine hydrokinetic, geothermal, and biopower into this legislation. I thank him for that.

I know my colleagues Senator KING and Senator SANDERS—and I know we will be joined by Senator REID on the floor—are continuing to push the envelope on innovative ways to make sure distributed generation works for our citizens.

This is something we didn't get as much in the bill as we wanted. We certainly put some new authority to make sure we are protecting consumers. But I think we will probably see that people will want to go further to make sure we are empowering everybody—from members of the Tea Party to the environmentalists who want to be in the solar business to those who put solar panels on their roof or anyone else who doesn't want to be gouged for the cost of doing that by the utility. They want the utility to make the investment, and they want to get a return for participating in reducing energy costs.

I wish to thank all of those who worked on the cyber security section of the bill, which, as I mentioned, is very important. In 2003, more than half of the cyber incidents were directed at critical energy infrastructure. So the bill today basically says that the Department of Energy will be the lead role in coordinating our cyber response for the energy sector and that we will be working on the R&D in partnership with the private sector to make sure we have the right kind of information sharing to continue to make the kinds of investments for resiliency that we need to have for cyber security.

I would like to mention a few more items. The advanced vehicle technologies program—Senators STABENOW, PETERS, and ALEXANDER all worked on this section of the legislation to try to, as I mentioned earlier, take the same fuel efficiency we have in automobiles and do the same thing for trucks. Companies in my State, such as PACCAR and the Pacific Northwest National Laboratory, are already trying to drive down the cost of truck transportation. Why? Because they see how much freight the United States is moving to overseas markets. We see that we have products we are going to sell to a developing overseas world, but we have to move them cost-effectively, so we put a lot of work into making our truck transportation efficient.

I thank Senator Warren for her work on the Energy Information Administration provisions and Senator MANCHIN for his work on workforce issues-which I am sure we will continue to hear about when we come to the floor as it relates to our mine workers and a variety of other people keep transitioning to new job training to make sure we have the workforce for tomorrow. Lastly. I also want to mention my colleague Senator HEINRICH, who has been very active on the workforce issues as well and making sure we have grants for work shortages and job training.

I think my colleague from Alaska said it best—that this is not a bill which is about what everybody wanted but about what we could do and that is important to move forward now. It was built on a good, bipartisan process, and people were able to have input. We hope to follow the same process here on the floor. I am sure my colleagues on this side of the aisle will want to talk about ways in which we could go further.

The American Energy Innovation Act we introduced last September has many of these provisions, such as having an energy efficiency resource standard at a national level and getting Senators BENNET and ISAKSON'S SAVE Act, which makes sure consumers realize as homeowners the benefits of the investments they make in energy efficiency.

I also mention my colleagues, Senator REID of Nevada and Senator KING of Maine, who have shared innovative ways to make sure consumers benefit from being in the solar business.

I am sure we will hear from many more people on both sides of the aisle about their ideas and how they would like to improve this bill.

As my colleague from Alaska said, it is important that we work together and not try to torpedo this bill but instead move forward on what has been a good, bipartisan process and continue to make investments for the future.

One of the last issues I wish to mention, as an investment for the future, is the success of the Land and Water Conservation Fund. I am so proud that the Land and Water Conservation Fund was original legislation by my predecessor, Scoop Jackson, a Senator who served our State for many years. I think the Land and Water Conservation Fund is one of the most successful conservation programs in our country's history. It had been successful for more than 50 years before it was dismantled. but we were able to reestablish it in the omnibus for the next 3 years. Obviously our committee came to a bipartisan decision on this issue, and we believe it should be made permanent. It was such a successful program, it should at least receive the same attention it did for the first 50 years so we can continue on the same journey we have been making so we can be sure we have open space in the United States of America as we continue to grow.

These are important outdoor spaces that have generated an incredible outdoor economy for the United States of America. It has generated economic revenue by providing the ability for people to go to the outdoors. I hope we will keep that as part of this legislation as it moves all the way through the U.S. Senate and the House and to the President's desk—permanent reauthorization of the Land and Water Conservation Fund.

At this time, I am going to turn the floor back over to our colleagues so they can discuss this bill or other issues, but before I yield, I will reiterate that this legislation is about the modernization of energy—the lifeblood of our economy-and driving down the costs through investments on a new strategy for the future. It is not about holding on to the past as much as moving forward to the future, and it will enable our businesses, our ratepayers, and all of those whom we care about in that economy to continue to reap the benefits of next-generation energy technology—renewable technologythat is cleaner, more efficient, and will keep our economy in the driver's seat

for our own U.S. economy and be a game changer for us on an international basis so we can provide solutions that are cleaner, more efficient for sure, and will help us deal with the carbon issues around the globe.

With that, I yield the floor.

The PRESIDING OFFICER (Mrs. ERNST). The Senator from Texas.

Mr. CORNYN. Madam President, I know we will be breaking at the regular time for our policy luncheons. When I am finished speaking, I will yield the floor so that the Senator from Arizona can make any comments he wishes before we go into recess.

I want to say a few words about this legislation. I know that amidst the polarization and the circus-like atmosphere of our politics these days, people are really surprised to find out we were able to get some important work done here in the U.S. Senate in the year 2015

While this Presidential selection process goes forward in Iowa, New Hampshire, and South Carolina for both Democrats and Republicans, I think it is important that we continue to do the people's work here in the Senate. I can't think of any better subject for us to legislate on than this bipartisan Energy bill which was ably led by the chair of the energy committee, the Senator from Alaska, Senator MURKOWSKI, and our colleague, the Senator from Washington.

In my State and no doubt in other States, we have seen how important the energy sector can be to jobs. Texas is suffering a little bit, as are places such as North Dakota, Alaska, and other big energy States, because the price of oil is so low. Actually, it is good for consumers because gasoline prices are cheaper than they have been in a long time. We have been able to see how smart energy policies can have a positive influence on jobs and stronger economic growth not just in Texas but across the country. So taking advantage of our natural resources and diversifying our energy supply when we can is a win-win situation.

This legislation, the Energy Policy Modernization Act, will update our energy policies for the 21st century. I can't tell you how many times I have heard people say: Well, we don't have a national energy policy. Unfortunately, that is true, but this Energy Policy Modernization Act will go a long way toward developing sound energy policy that will help us produce more energy, help us use the energy we produce more efficiently, and it will allow consumers and businesses to save money.

This bill modernizes the U.S. electric grid—the infrastructure that provides us with electricity—which, of course, we don't think about too often until we have a brownout or a blackout as a result of some incident. It is very important that our electric grid be reliable and more economical in the long run.

This bill also seeks to diversify our energy supply, including promoting research on renewable energy options

while updating our policies on mineral extraction as well. I think this legislation promises to allow us to continue to be productive now in this new year, 2016

I wish to add one other word about the Senator from Alaska, Ms. MURKOWSKI, the chair of this important committee. Thanks to her leadership, Congress was able to pass legislation to finally lift the export ban on crude oil—a ban that had been in place for 40 years. Really, that change was the most contentious part of this energy policy. I think she has wisely separated those two issues and left the Energy Policy Modernization Act as one that does enjoy broad bipartisan support.

We also need to continue to expedite our exporting of liquefied natural gas, which this bill does. It will help us to get more of our energy to international markets and will provide domestic suppliers a more reliable timeline for building the infrastructure—which is not cheap—to allow us to export more of our domestic resources.

This has really been the story of our energy resources here in America, where we have constantly underestimated the impact of technology and innovation when it comes to energy. Just a few years ago, we used to talk about something called peak oil, as if all the oil had been discovered and there wasn't any more there. Thanks to the innovative use of horizontal drilling, together with fracking, which had been around for 70 years or more, people realized that America holds the promise of being the next energy exporter in the not too distant future.

I have heard the senior Senator from Arizona, the chair of the Armed Services Committee, make this point, which I enthusiastically agree with: Our energy resources here in America are a natural security asset. What we see around the world, particularly in Europe, is that people like Vladimir Putin use energy as a weapon. Our willingness and ability to export energy will not only create jobs in America, but it will help grow our economy by making sure our small businesses have access to reasonably priced energy, and it will also help strengthen our friends and allies around the world.

I look forward to discussing the bill. I hope we can move on some of the amendments that have been brought up on both sides of the aisle and in so doing continue to strengthen America's hand as an energy powerhouse in the 21st century.

I vield the floor.

The PRESIDING OFFICER. The Senator from Arizona.

Mr. McCAIN. Madam President, I ask unanimous consent to address the Senate as in morning business for whatever time I may consume.

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

OVERRULING THE AUTHORIZING COMMITTEE

Mr. McCAIN. Madam President, last month I came to the floor and called attention to a provision in the Consoli-

dated Appropriations Act for fiscal year 2016. I will remind my colleagues about the 2,000-page omnibus bill that all of us had approximately 48 hours to view before voting yes or no on it. I specifically objected to a provision that, in an egregious exercise of pork barrel parochialism, reversed reasonable restrictions on the Air Force's use of the Russian-made RD-180 rocket engine for national security space launches. I explained how that provision was secretly airdropped into the 2,000-page omnibus bill and overruled the authorizing committee—in other words, an outrageous overruling of the authorizing committee. They dropped this provision into the middle of this 2,000-page bill while we had hearings, discussions, markups, and debates on the floor of the U.S. Senate which considered 100-and-some amendments. So what we saw buried in this 2,000-page bill was a direct contradiction to the authorizing process.

This process must stop. We have to stop allowing the appropriators to make policy. That should come from the authorizing committee. I tell my colleagues now: I will not stand for it any longer.

Sometimes we wonder why the Americans are angry and why they are supporting Trump, SANDERS, or some outsider. All they have to do is look at the process we went through with this 2,000-page bill. It wasn't just the rocket engines; it also included hundreds of millions of dollars in unnamed projects, including \$225 million for a ship that the Navy neither wants nor needs. By the way, that was the second one. We were supposed to build 10. So the appropriators—the Senator from Alabama—again added a \$225 million ship that the Navy neither wanted nor needed, which was made and manufactured in Mobile, AL. We can't do that. It has to stop.

Of course, they acted in a way that it now provides tens, if not hundreds, of millions of dollars to Vladimir Putin and his corrupt cronies. How do we justify such action?

The American taxpayers should be outraged to learn that some U.S. Senators want American taxpayers to continue subsidizing Russian aggression and comrade capitalism. But those very Senators thought that if they snuck their blank check to the Putin regime into an unamendable omnibus bill, no one would stop them. I rise in the hope that Congress will prove them wrong. That is why I will be joining with House majority leader KEVIN McCarthy to introduce legislation that would repeal this section of the omnibus bill and reassert the will of the Congress and the American people.

It is morally outrageous and strategically foolish to ask the American taxpayers to subsidize Russia's military industrial base when Vladimir Putin, whom the Treasury Department

has reportedly accused of being personally corrupt, occupies Crimea, destabilizes Ukraine, menaces our NATO allies in Europe, violates the Intermediate-Range Nuclear Force Treaty, sends weapons to Iran, and bombs U.S.-backed forces in Syria to prop up the murderous regime of Bashar Assad, and all for the benefit of a rocket plant in Alabama.

I won't go into too many details here, except to point out that after the United States imposed sanctions against Russia in March of 2014, Russian Deputy Prime Minister Dmitry Rogozin, who oversees the space industry in Russia, indicated several times that Russia expects that the United States will not use RD-180 engines for military launches and threatened to stop supplying them.

Rogozin declared: "We are not going to deliver the RD-180 engines if the United States will use them for noncivil purposes. We also may discontinue servicing the engines that were already delivered to the United States." He also threatened to deactivate all GPS sites in Russian territory and ban U.S. astronauts from the International Space Station by 2020. Rogozin suggested that in the future, the United States should deliver "its astronauts to the ISS with a trampoline."

Later that year, Rogozin appeared to reconsider. After all, in order to design and build more rocket engines in Russia, Rogozin said, "we need free money. This is why we are prepared to sell them . . . taking the sanctions very pragmatically."

So what are Russia's two desired outcomes? On the one hand, America continues its dependency on Russian rocket engines. On the other hand, America helps Putin go around sanctions by getting "free money" for rocket engines. And this is who ULA and its congressional sponsors want us to do business with?

At the same time, Russia has threatened to cut off supply, Energomash has pursued other business opportunities with other countries that would give Russia a freer hand in making good on its threats—most notably, China.

In July 2015, President Putin signed a new law that consolidated the Russian space industry under a single state corporation, an entity called Corporation Roscosmos. This was done to enhance the power of the Russian Government to better implement state-based policy and control the space industry. He signed an order that will effectuate this law.

In addition, Putin appointed Igor Komarov chief executive of the newly created Corporation Roscosmos. Komarov was the former chairman of one of Russia's largest carmakers and an adviser to Sergei Chemezov. Chemezov, who was also appointed to the board, is said to have served as a KGB officer with Vladimir Putin in Germany back in the 1980s, and he has been targeted by our sanctions.

Under the same order, Putin also appointed Russian Deputy Prime Minister Dmitry Rogozin, and the list goes on and on.

So why do we want U.S. taxpayers sending millions of dollars to the Russian Government when Vladimir Putin occupies Crimea, destabilizes Ukraine, et cetera. To add insult to injury, this last year, on the defense bill, we had to legislate to stop—to stop—the U.S. Defense Department from giving \$800 million per year to ULA. That is the outfit that now launches using Russian rockets-ULA-with Russian rocket engines. We had to prohibit the continued payment of \$800 million a year they were paying them to stay in business. It is amazing. I figured out that roughly, since 2006, we have paid this ULA, which is a combination of Boeing and Lockheed Martin, some \$7 billion to stay in business. It used to be called the military industrial complex that Eisenhower warned us about when he was leaving office. It is now the military industrial congressional complex that puts in a 2,000-page bill a requirement to build a \$225 million ship that nobody wants and that the Navy doesn't need, for the second year in a row. That is \$450 million of your tax dollars that went to build two ships that the Navy neither needs nor wants.

My friends, do you wonder about the cynicism of the American people? Do you wonder why they think the way we are doing business in Washington is corrupt, when we spent \$240 million in 2 years on two ships that the Navy doesn't want or need and when we subsidize an outfit—the only one that until recently does space launchesand paid them \$800 million a year to stay in business, spend hundreds of millions of dollars on unspecified scientific programs, take hundreds of millions of dollars from medical research that has nothing to do with defense and take it out of defense? Would we wonder that the American people are angry and frustrated? Look at what we are doing with their tax dollars.

I don't know if it was 48 or 72 hours that we had to vote up or down on a 2,000-page, \$1.1 trillion document, and no amendments were allowed.

So I say to my colleagues: Do not wonder; do not be curious why they are out there flocking to the banner of Senator SANDERS, the only announced socialist in the U.S. Senate and on the other side people like Donald Trump, who has never had anything to do with Washington, DC. They should not be surprised.

Well, all I can say to my colleagues is that I am not going to stop, because I owe the people of Arizona a lot better than what we are giving them. We owe them an accountability of why we would spend \$800 million a year to keep a company in business. We owe them an explanation of why we would over the last 2 years spend \$450 million for two ships that the Navy neither wants nor needs because they are made in Mobile, AL. We owe them a lot better

than our performance on this omnibus appropriations bill.

I will be glad to talk more about how each individual was blocked by the other side and would not agree to move forward and the rules of the Senate and all that, but that really doesn't make much difference at the Rotary Club. What makes a difference is that we have wasted billions of dollars of the taxpayers that were neither wanted nor needed nor ever had a hearing in the authorizing committee.

I am proud of the work we do on the Armed Services Committee. We have literally a hearing every day. We spend hours and hours and hours in markups and debate and discussion on these various programs. We have hearings with administration officials. We have hearings in the subcommittees. I am so proud of the bipartisan approach that we take on our Defense authorization bill, working closely with Senator REID and my colleagues on the other side of the aisle. I am proud of the product, after literally thousands of hours of testimony, of study, of voting, and all of that. Then we get a 2,000-page omnibus appropriations bill stuffed with billions of dollars of projects that we never, ever would consider in the authorizing committee.

So the system is broken. The system is broken, and it better be fixed. I am telling my colleagues, especially those on the Appropriations Committee: This will not stand.

I yield the floor.

RECESS

The PRESIDING OFFICER. Under the previous order, the Senate stands in recess until 2:15 p.m.

Thereupon, the Senate, at 12:40 p.m., recessed until 2:15 p.m. and reassembled when called to order by the Presiding Officer (Mr. SCOTT).

ENERGY POLICY MODERNIZATION ACT OF 2015—Continued

The PRESIDING OFFICER. The Senator from Delaware.

TRIBUTE TO FEDERAL EMPLOYEES

Mr. CARPER. Mr. President, in 2014, I began coming to the Senate floor almost every month. I came here to highlight some of the great work done each and every day by the men and women who serve us in the Department of Homeland Security. I continued that effort throughout much of last year and plan on coming to the Senate floor every month in 2016 with a new story to share. There is simply so much good being done across the Department by the employees, our public servants who work there. I don't think I am going to run out of material anytime soon.

As you know, the Department of Homeland Security is made up of some 22 component agencies and employs over 200,000 Americans. These men and women work around the clock to protect all of us, our families, and our country.