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and Public Works Washington, D.C.

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HEARING ON S. 2662, THE GROWING AMERICAN INNOVATION NOW ACT

Wednesday, November 6, 2019

United States Senate

Committee on Environment and Public Works

Washington, D.C.

The committee met, pursuant to notice, at 10:06 a.m. in room 406, Dirksen Senate Office Building, the Honorable John Barrasso [chairman of the committee] presiding.

Present: Senators Barrasso, Carper, Inhofe, Capito, Cramer, Braun, Rounds, Sullivan, Boozman, Ernst, Cardin, Gillibrand, Markey, Van Hollen.

STATEMENT OF THE HONORABLE JOHN BARRASSO, A UNITED STATES
SENATOR FROM THE STATE OF WYOMING

Senator Barrasso. Good morning. I call this hearing to order.

Today, we are here to discuss S. 2662, the Growing American Innovation Now Act, or the GAIN Act. This bill would bring long overdue legislative reform to the Clean Air Act's New Source Review program. The New Source Review program protects air quality when industrial boilers, factories, and power plants are modified or newly built. The GAIN Act provides much-needed clarity to factory and power plant owners, as well as to State permitting officials, about when permits are needed.

The New Source Review program was originally designed to support pollution control projects and upgrades. It has actually had the opposite effect. In its current form, the program is complex, it is costly, it is time-consuming. The program directly slows economic growth. It slows jobs creation, it slows technical innovation, as well as the ability to modernize our American industry and infrastructure.

The Portland Cement Association submitted a letter to the committee outlining the extreme burden that New Source Review places on its members. The association explained that, "A member company sought a permit to combust alternative fuels. The EPA Regional Office insisted that permitting to burn

alternative fuels automatically triggered NSR permitting. After going through a costly, lengthy, and burdensome process, the EPA Regional Office concluded that the project was not required to go through NSR permitting. It took five years to go through this process."

Five years to figure out that you do not need a permit. That is simply unacceptable. So I ask unanimous consent to enter the letter into the record. And without objection, it is done.

[The referenced information follows:]

Senator Barrasso. Such permitting uncertainty and delays discourage key upgrades that would otherwise be good for the economy and the environment. Last year, a group of seven unions wrote to the committee urging New Source Review reform legislation. These seven unions that wrote state, "The New Source Review program adversely impacts American workers by creating a strong disincentive to undertake projects that can improve the efficiency and productivity of existing utility and industrial plants, ranging from steel and chemicals to refineries."

I am going to enter that letter into the record without objection as well.

[The referenced information follows:]

Senator Barrasso. Congress enacted the New Source Review program more than 40 years ago. It is time for us to streamline and modernize the program.

When Congress last addressed the New Source Review program, we didn't have power plants using carbon capture, like we now have at the Petra Nova project. At a 2017 hearing before this committee, NRG Energy testified that it had to redesign the Petra Nova project in Texas to avoid triggering New Source Review requirements. This unnecessary re-design added \$100 million to the cost of the project.

We can't have our environmental regulations pose roadblocks to critical technologies that would reduce our emissions, and combat climate change. The GAIN Act would make much needed changes to the Clean Air Act. It would provide more clarity about what types of changes fit the definition of "modifications," and therefore warrant a New Source Review permit.

The bill would clarify that projects designed to reduce emissions or improve reliability and safety should not generally trigger New Source Review permits. Permitting would no longer be based on annual emissions estimates, which have been the subject to endless litigation and are very difficult to project.

So I would like to thank Leader McConnell, Senator Braun, Senator Capito, Senator Paul, and Senator Inhofe for joining me

on this bill. The GAIN Act is identical, identical, to a bipartisan bill, the New Source Review Permitting Improvement Act, that is sponsored in the House by Congressmen Morgan Griffith and Collin Peterson and Alexander Mooney.

I encourage Senate Democrats to join us in making this bill bipartisan on this side of the Capitol as well, as we have it bipartisan in the House. Any Senator who cares about economic growth, emissions reductions, and clear regulations, I would encourage to support this legislation.

Now I would like to turn to Ranking Member Carper for his opening remarks.

[The prepared statement of Senator Barrasso follows:]

STATEMENT OF THE HONORABLE THOMAS R. CARPER, A UNITED STATES
SENATOR FROM THE STATE OF DELAWARE

Senator Carper. Thanks, Mr. Chairman.

I am going to do something today I don't think I have ever done in 18 years. I just ask my colleagues to bear with me for a moment.

We all have military personnel who have served, been injured, and some killed. I just want to share with you briefly before I recap my opening comments just a couple of words about an Army Battalion Ranger from Delaware who was nearly killed two months ago today.

He sustained four brain injuries, a log building exploded, crushed him and some other people. Broke his ribs, broke his pelvis, broke his leg, right leg. Fractured vertebrae in his spine, and it is amazing he is alive. He was miraculously saved there, eventually brought back to Walter Reed, and has gotten great care there. He was moved a couple of weeks ago, I talked to him, and he was moved to the polytrauma center in Tampa, Florida.

His mom lives in Delaware, I talked to her the other day. She says he is doing well. He has no infections. Apparently, he is learning to walk again. He needs occupational therapy; he needs brain stimulation. Four traumatic brain injuries, can you believe that. Currently he is having difficulty remembering.

He remembers the incidents and some items, others he loses focus on. But he has a good attitude. I talked to him, and I told him that, in the words of Henry Ford, if you think you can and you think you can't, you are right.

This is a greeting card. His mother said he loves cards. She said, maybe you can send him one. I am going to send him one, and ask you all to sign it, all my colleagues. Thank you.

Now I want to say terrible things about this bill.

[Laughter.]

Senator Carper. When I was a Congressman, I used to hold a lot of town hall meetings. I still have some, not as many as then. Every now and then somebody would raise an issue and say, they would have an idea, or propose an idea which really was devoid of much value. Rather than just say, that is the dumbest idea I have ever heard, I would say, now, there is a germ of a good idea on what you are proposing, and just focus on that germ of a good idea.

The issue that the Chairman is raising here is one that is not new, and we adopted the Clean Air Act, gosh, how many years ago, many, many years ago. I was involved in 1990 in the modification of the amendments to the Clean Air Act. So this is not a new issue. It is one I would welcome, Mr. Chairman, just a chance to sit and talk with you and your staff, and to explore, find out where there is a germ of a good idea. I think

there probably is.

But I am just going to ask that my statement for the record be entered. Some of you have heard me say this before. I live in a little State in the northeast, we are the 49th largest State. But we are surrounded by a lot of other States, where there is a lot of pollution. When I was governor, I could have shut down the economy of my State, stopped every car on the roads, we still would have been way out of compliance for Clean Air standards in a lot of ways because of the pollution that comes to us from other places.

My fear, one of my fears is that this legislation doesn't help that situation get any better. We all care about our States, the quality of the air in our States. This is something we continue to wrestle with. My fear is this legislation, if adopted, won't make that any better.

But I would be willing to have a conversation, Mr. Chairman. In the meantime, I just ask unanimous consent to enter into the record this statement.

Senator Barrasso. Without objection.

[The prepared statement of Senator Carper follows:]

Senator Carper. And I would ask my colleagues, if you would take the time just to write a note on this.

Senator Barrasso. What is his name?

Senator Carper. It is Kyle Robert Montgomery, Ranger.

Senator Barrasso. We would be happy to do it.

Senator Carper. Thank you.

Senator Barrasso. We can start with our number one veteran, and we can continue throughout. Thank you.

We will now hear from our witnesses. Jeff Holmstead, who is a partner at Bracewell LLP; we have also Sean Alteri, who is the Deputy Commissioner of the Kentucky Department for Environmental Protection; as well as John Walke, who is the Clean Air Director for the Natural Resources Defense Council.

I would like to remind the witnesses that your full written testimony will be made part of the official hearing records. Please keep your statements to five minutes, so that we may have time for questions. I look forward to hearing the testimony of each of you.

Director Alteri, I think you are first. Will you please proceed?

STATEMENT OF SEAN ALTERI, DEPUTY COMMISSIONER, KENTUCKY
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Mr. Alteri. Good morning, Chair Barrasso, Ranking Member Carper, and members of the committee. My name is Sean Alteri, and I currently serve as the Deputy Commissioner for the Kentucky Department for Environmental Protection. I am honored to testify today, and I appreciate the opportunity to provide comments relative to the New Source Review program.

It is important to note that the New Source Review program is utilized by EPA, State, tribal, and local air pollution control agencies to attain and maintain compliance with the National Ambient Air Quality Standards. The New Source review program is necessary to protect the health of our citizens and prevents the significant deterioration of air quality.

Regarding this legislation, the proposed amendments are narrow in their scope of the New Source Review program. This bill proposes to amend the definition of modification to exclude projects that implement efficiency measures, which reduce the amount of any air pollutant emitted by the source per unit of production. The proposed amendment also limits the emissions increases to the maximum achievable hourly emission rate demonstrated in the last ten years.

To be certain, this bill does not apply to new major stationary sources, or new units that exist in major stationary

sources. This bill does not allow the de-bottlenecking of downstream emission units and does not exempt those emissions from New Source Review. And this bill does not allow sources of emissions to violate the National Ambient Air Quality Standards.

Since 2008, the Cabinet has issued more than 25 New Source Review permits. These actions allow for economic growth and development, while requiring major sources of emissions to install and operate the best available control technologies. During this same time period, air quality in Kentucky has improved dramatically.

In the last ten years, emissions of sulfur dioxide have increased more than 83 percent, and emissions of nitrogen oxides have decreased by more than 70 percent from our coal-fired electric generating units. These tremendous reductions did not occur as a result of New Source Review.

Due to potential applicability of New Source Review requirements, facilities have unfortunately foregone efficiency measures and improvements that can provide substantial environmental benefits. This bill will not allow coal-fired electric generating units to violate the applicable emissions standards established by the Cross-State Air Pollution Rule and the Mercury and Air Toxics Standards. However, this bill will allow an existing coal-fired electric generating unit to implement energy efficiency measures and reduce their emissions

of carbon dioxide per megawatt hour generated.

Energy efficiency projects at existing coal-fired electric generating units will be necessary to reduce their carbon dioxide emissions and will be critical for air pollution control agencies to meet the requirements of the Affordable Clean Energy rule. A State plan under the ACE rule will establish carbon dioxide emission limitations from existing coal-fired generating units for the first time.

Balancing environmental protection and economic growth and development often creates tension between regulated industries and environmental activists. This tension is most noticeable and evident in the Clean Air Act's New Source Review program. When setting forth the statutory authority, Congress declared the New Source Review program is "to ensure that economic growth will occur in a manner consistent with the preservation of clean air resources."

Striking the proper balance between economic growth and protection of our air resources is essential to fulfill our statutory obligations as regulators. To resolve this tension, final determinations of New Source Review permits are often administratively challenged and decided through litigation. In recent years, the New Source Review program has served as the vehicle to delay the permit process and the construction of major economic development opportunities.

In Kentucky, third-party interest groups challenged or petitioned EPA to object to eight air quality permits related to New Source Review in the last ten years. All of the challenged air quality permits utilized coal as an energy resource, and the focus of the challenges centered on coal-fired electric generation. Ultimately, EPA and the courts found that the air quality permits issued by the Division for Air Quality contained all applicable requirements and sufficient monitoring to demonstrate compliance.

In an effort to resolve the differences of this proposed legislation, one option would be to further restrict the scope of the New Source Review amendments to apply only to energy efficiency projects at existing coal-fired electric generating units. By establishing clear statutory authority, State air quality regulators will be provided with the regulatory certainty to establish carbon dioxide emission limitations from existing coal-fired generating units, and again, for the very first time.

Again, thank you for the opportunity to comment today. I look forward to any questions you may have regarding my testimony.

[The prepared statement of Mr. Alteri follows:]

Senator Barrasso. Thank you so much for your thoughtful testimony. We appreciate your coming in from Kentucky to do that.

Mr. Holmstead.

STATEMENT OF JEFFREY R. HOLMSTEAD, ESQ., PARTNER, BRACEWELL LLC

Mr. Holmstead. Thank you very much for giving me the chance to testify this morning.

Senator Carper. Have you testified here before?

Mr. Holmstead. A few times.

Senator Carper. If you had to guess how many times you have testified here, how many times would you guess? A dozen or more?

Mr. Holmstead. Well, maybe close to that number. Yes, quite a few.

Senator Carper. Welcome back.

Mr. Holmstead. Thank you.

Senator Carper. We don't agree with you on everything.

Mr. Holmstead. I have to say, it is always an honor to be here.

As some of you know, for almost 30 years, I have devoted my professional career to working on Clean Air Act issues. As a staffer in the White House, as the head of the EPA Air office and as an attorney in private practice. And I have to say that one of the things I find so frustrating is, it is very hard to have an honest conversation about the New Source Review program; what it does, and what it doesn't do.

I had the chance last night to review the testimony from NRDC. I have to say that I found it dispiriting, even bordering

on dishonest when it comes to coal-fired power plants. I want to just tell you why.

Historically, the pollutants of greatest concern from power plants have been SO₂ and NO_x, because of their impact on human health and the environment. In 1990, when the modern Clean Air Act was passed, and at least two of you were involved in that, power plants were far and away the biggest sources of SO₂ in the Country, and along with motor vehicles, the biggest source of NO_x.

But since 1990, power plant emissions of SO₂ have decreased by 92 percent in our Country. And power plant emissions of NO_x have decreased by 84 percent. That is a remarkable achievement.

If you read the NRDC testimony and didn't know anything about the Clean Air Act, you would assume that the NSR program must be responsible for all these pollution reductions, that all these plants triggered NSR and were forced to install the best available control technology. But that is simply not the case.

If you go to the EPA website that tracks power plant emissions, it says that these dramatic reductions are attributable to a number of other regulatory programs, primarily a series of cap and trade programs, starting with the Acid Rain program, that have imposed increasingly stringent caps on SO₂ and NO_x emissions from coal-fired power plants. NRDC seems to believe that the best way to reduce emissions is to wait until

plants trigger NSR, and they are required to install BACT. But EPA has learned that it is actually much better just to issue regulations telling them that they have to reduce their emissions by how much and by when.

You might be surprised to know that there are many different Clean Air Act programs that regulate the very same pollutants from the very same facilities. In fact, power plant emissions of SO₂ and NO_x are regulated under at least 14 different Clean Air Act programs, a cornucopia of acronyms, that some of you know.

The NRDC testimony gives these programs no credit. But these are the programs that have actually reduced power plant emissions by 90 percent over the last 25 years. And these are the very same programs that will make sure that pollution continues to go down, regardless of what happens with the NSR program.

I did a word search last night and found 15 different places in the NRDC testimony saying that the reforms in the GAIN Act would lead to either massive or enormous increases in pollution, and 13 places saying ominously that it would allow industrial facilities to evade pollution controls. I will say, in a theoretical world, where there are no other environmental regulations, and there is unlimited demand for all products, this might be the case.

But in the real world, even if Congress decided to exempt all existing power plants from NSR entirely, and that is not what this bill does, but even if they did, there would not be an increase in power plant pollution. In fact, because of the many other programs that regulate the same pollutants from these facilities, emissions would continue to decrease as they have been doing since 1990.

The NRDC testimony almost concedes that total emissions would continue to go down, but suggests that the current NSR program is needed to ensure that no individual plant can increase its annual emissions. But this is just plain silly. The current NSR program does nothing to prevent a facility from increasing its emissions. Annual emissions from individual plants go up and down all the time, for reasons entirely unrelated to NSR and modifications.

The hours that plants run depend entirely on what the demand is. If the economy heats up, or if other big power plants in an area shut down for any reason, other plants will need to operate more hours, and their annual emissions will increase. That is the way the world works.

The NSR program doesn't prevent this. But thankfully, as Mr. Alteri said, there are many other regulatory programs that when there are these increases in annual emissions, they are not enough to adversely affect air quality or cause health problems.

In the real world, the current NSR program does make it difficult for plant owners to make capital investments that would make their plants more efficient, and it does make it more difficult to maintain industrial plants in good working order. The GAIN Act would remove these disincentives while still ensuring that when a new industrial facility is built or an existing facility is expanded, it will be required to install the best available control technology at that time.

Again, I thank you very much for inviting me here today. I look forward to answering questions.

[The prepared statement of Mr. Holmstead follows:]

Senator Barrasso. Thanks so much for your very thoughtful testimony. We appreciate your coming back to the committee today.

Mr. Walke.

STATEMENT OF JOHN D. WALKE, ESQ., CLEAN AIR DIRECTOR AND SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

Mr. Walke. Thank you, Chairman Barrasso, Ranking Member Carper, and committee members.

I have been a Clean Air attorney for over 25 years. I am afraid this bill is the most harmful Senate bill to amend the Clean Air Act I have ever read. This bill allows a greater amount of air pollution increases from a greater number of industrial polluters than any Senate bill I have seen.

Indeed, the bill lets industrial facilities increase dangerous air pollution to higher levels than they ever have polluted, worsening air quality and evading pollution controls that today's law requires. This bill lets facilities increase pollution all the way up to their worst possible polluting hour in the past ten years, and then, incredibly, the bill lets facilities exceed even that astronomical increase.

Bill supporters say there are other legal limits on these enormous pollution increases. That begs the question: why weaken the law so severely to allow massive pollution increases, if there are these other limits on actual pollution increases? The answer is because there are not these other limits.

My written testimony provides multiple examples why these other limits on the actual pollution increases do not exist, or do not limit massive increases. Notably, the written testimony

of my fellow witnesses does not contain a single example of a single law that limits actual air pollution increases from a single facility in the Country, much less the many thousands of facilities that this bill would let increase air pollution.

The main benefit of today's New Source Review safeguards are to constrain runaway pollution increases. When my fellow witness, Mr. Holmstead, headed the Bush EPA Air Office, EPA rejected an approach similar to this bill's amnesty, saying the approach would mean "increases in emissions that would be detrimental to air quality," allowing pollution increases of 100 to 200 percent. The Bush EPA Enforcement Office found that a single power plant that had violated the law and evaded pollution controls would have been able to get away with an astonishing 21,000-ton per year increase in smog-forming pollution under the approach of this bill, and the approach the Bush EPA rejected.

How bad is a 21,000-ton increase from one plant? That is greater than the total smog-forming pollution from all coal-burning power plants in each of these committee's States: Alabama, Arkansas, Delaware, Iowa, Maryland, Mississippi, New Jersey, Oklahoma, and Oregon. A 21,000-ton increase is an incredible 7 percent of all smog-forming, nitrogen oxide pollution emitted from all sources in Indiana, including cars and trucks and industrial and manufacturing plants. It is 10

percent of all sources in Kentucky, 12 percent of all sources in Iowa, and an astounding 91 percent of all pollution from all sources in Delaware, nitrogen oxides.

When smokestacks are belching more smog pollution from burning coal or oil, they are also belching more of the brain poisons lead and mercury, more cancer-causing pollution, more carbon pollution that drives dangerous climate change. A 21,000-ton smog increase would correspond to many millions of tons of increased carbon pollution.

What about claims that the bill encourages energy efficiency? What bill supporters claim to incentivize are marginal improvements in pollution rates that are then allowed to increase overall air pollution significantly and worsen air quality significantly. This is not greater efficiency.

But the bill does not even require any efficiency improvements. Facilities may increase pollution up to and beyond their worst possible polluting hour in ten years, becoming less efficient.

The parents of a child rushed to the ER from an asthma attack do not care if pollution per product or kilowatt decreases. What these frantic parents care about is their daughter's health after overall air pollution worsens, causing her asthma attacks. That is what this bill's amnesty enables: more pollution, more asthma attacks.

This bill does helpfully confirm how illegal a proposed Trump EPA rollback is that pretends the Clean Air Act authorizes the same rollbacks in this bill. Current law does nothing of the sort, as even the bill's co-sponsors seem to realize.

The House is unlikely to pass any version of this bill. The main thing this bill appears to do now is attempt to give cover to the proposed Trump EPA rollback. The bill says it is merely clarifying the Clean Air Act, but that is plainly incorrect, as all the bill's next text makes clear.

If you want to let industries pollute more, that is what this bill does. If you want to explain to Americans why we should let industry pollute all the way up to their worst possible polluting hour in ten years, that is what this bill does. And then pollute even more than that, all the way up to what they are physically capable of polluting, that is what this bill does.

Deadly tiny particle pollution has worsened over 5 percent since 2016. We don't need to go backward further. Senators should not advance this bill.

Thank you.

[The prepared statement of Mr. Walke follows:]

Senator Barrasso. Thank you for your testimony. I would like to enter into the record a letter of support for today's hearing, for this bipartisan bill, to point out that this was bipartisan, submitted from the House of Representatives, the New Source Review Permitting Act, H.R. 172, the House companion to the GAIN Act. I would encourage others, in a bipartisan way, to support the legislation.

[The referenced information follows:]

Senator Barrasso. Let's go to questioning at this time. I would like to start with Mr. Holmstead.

To understand how badly we need reform, and you touched on some of those things in your opening statement, I think it would be helpful for all the committee to know the types of projects that the current New Source Review program complicates or discourages, makes it harder. Could you walk us through some examples of projects at a power plant or a factory that the current program discourages?

Mr. Holmstead. Sure, yes. I would love to do that.

So if you look at all the NSR enforcement cases that groups like John Walke's has brought, here is what you see. There is a power plant that has a component, and these components are called, like an economizer, it is a part of the power plant, it starts to wear out. And so they replace that component. They essentially just do the same thing that you would do if you replaced the water pump in your car.

They are not increasing the output; they are not increasing the capacity. They are returning the plant to its original design, to its original operations.

There are hundreds of those projects. That is what the NSR program has done. So if you operate a power plant, you have to have teams of engineers and lawyers to make sure that somehow, you don't run afoul of this program. That is what all these NSR

enforcement cases are about, is simply letting plants, well, efficiency improvements is another issue. But for the most part, these enforcement actions are about allowing plants to replace components that are part of the way they were originally designed.

Senator Barrasso. Mr. Alteri, the Trump Administration is pursuing a number of reforms to the New Source Review program through updated regulations, guidance, memoranda, different things. In your testimony, you note that the Commonwealth of Kentucky has supported regulatory reforms to the program. As a State regulator, who has implemented the Clean Air Act? You are an administrator who has actually implemented the Clean Air Act. Can you talk about why legislation is also necessary?

Mr. Alteri. In Kentucky, we are prohibited from regulating by policy and guidance. So it is always critical for EPA to go through the regulatory rulemaking process. Also, as a regulator, and a former regulation supervisor, when you have clear statutory authority, then you don't have the risk of wasted effort when you do promulgate the regulations, and you can always point back that you have clear statutory authority.

Senator Barrasso. Mr. Holstead, back to you. You have heard the other witnesses testify. I know you read the testimony previously, and you made some comments about that. Anything else you have heard from the other witnesses in terms

of things you would like to add to your testimony this morning?

Mr. Holmstead. Again, I would love to wager, Mr. Walke, I would wage a year's salary that if you pass this bill, there is not going to be an increase in pollution from power plants. Just think about it. Power plants operate to provide electricity to people who demand it.

If you pass this bill, is demand going to go up that is going to make power plants increase their hours of operation? No. And all those power plants have limits in their permits or, because of allowances, that keep their pollution down. So that claim about these massive pollution increases, again, it is based on some theoretical world that is nothing like the real world.

The other thing I wish I could say quickly is, he claims in his written testimony that there is no evidence that the NSR program discourages efficiency improvements. I would just suggest that when Gina McCarthy takes over NRDC that he have a conversation with her about this. Because she has acknowledged that that is an issue.

There are dozens and dozens of cases where power plants have made energy efficiency improvements, and they have been targeted by NSR enforcement actions. So Mr. Walke claims that there is no peer-reviewed studies to prove that it discourages energy efficiency projects. But all you have to do is look out

there and see all the plants that have been subject to enforcement when they do that.

And I just think that is problematic. That is not the way the law should work.

Senator Barrasso. Mr. Alteri, back to you. Twenty years you have been with the Kentucky Department for Environmental Protection, you have implemented a lot of different Clean Air Act programs. Beyond the New Source Review program that we are looking at today, could you discuss any other EPA programs that Congress ought to modernize?

Mr. Alteri. I am always cautious, because I am a huge fan of the Clean Air Act. It has been successful legislation. But I think you need to look at it really thoroughly. I think the way we handle non-attainment areas, and basically we have a provision where we would withhold transportation dollars if you don't achieve attainment within a certain time period, well, that is counter-intuitive to improving air quality in areas like Cincinnati, Ohio, Los Angeles, where you need the infrastructure dollars to open up some corridors, Washington, D.C. All the non-attainment areas in the northeast are up I-95.

So I think that is one area where you want to be thoughtful and not restrict people from transportation improvements.

Senator Barrasso. Senator Carper.

Senator Carper. Sometimes we have hearings like this, and

on other committees, too, where there are smart people on very different sides of an issue, and I will ask them to help the committee think through where a principle of compromise lies. I would ask, Mr. Walke, where do you think a principle of compromise lies in this area? One that is respectful of human health, clean air, and doing better. Thanks.

Senator Carper. Sure. We should be encouraging true energy efficiency improvements that cause us to burn less fuel, save industry's money, reduce carbon pollution and reduce air pollution. That is true efficiency. There are improvements that could be made to New Source Review to improve all of those fronts.

What this bill does, however, is allow air pollution to increase, to allow fuel consumption to increase, to allow carbon pollution to increase, while avoiding the installation of modern air pollution controls. That is not a reasonable compromise. It is something that the Bush EPA rejected under Mr. Holmstead. It is something that the Bush EPA Enforcement Office criticized heavily in materials that I submitted to this record, showing that plants across the Country were illegally evading pollution controls and increasing pollution by thousands of tons.

That is not the right answer. If we want real energy efficiency improvements overall, carbon pollution should go down overall, air pollution should go down, and businesses and can

will become more efficient.

Senator Carper. Mr. Holmstead, same question, please.

Mr. Holmstead. I am encouraged by what John says. If there is a way to define, the way he defined energy efficiency improvements, or efficiency improvements, if those things could be, if you could know that those things wouldn't trigger NSR, let's work out a real definition of energy efficiency improvement. I think that would be a big step in the right direction. I think that would be a great idea. And I appreciate the opportunity to have that conversation with Mr. Walke.

Senator Carper. All right. Are you from Kentucky?

Mr. Alteri. I am, born and raised.

Senator Carper. Kentucky was in the news last night. My sister lives there.

Mr. Alteri. We beat Michigan State.

Senator Carper. There you go.

[Laughter.]

Mr. Alteri. So I think both of these gentlemen touched on it; if a boiler or an electric generating unit replaces a turbine, and it goes from an efficiency of 38 percent to 43 percent, that should be celebrated by everybody. However, by increasing that efficiency, it is going to dispatch more often. Then that goes to the annual increase in emissions. However,

you are still making less pollution per megawatt hour.

Considering that we are a coal State, and affordable electricity, reliable electricity, is our focus, I think it only makes sense to improve the efficiency at those existing coal-fired generating units.

Senator Carper. Mr. Walke, do you want to respond to that?

Mr. Walke. Yes, I touched upon this in my opening statement. Pollution going down per megawatt doesn't help people who are breathing dirtier air, it doesn't help that asthmatic child. That is not an improvement to the system, that is a severe weakening of the rule. It is exactly the type of thing that New Source Review is supposed to guard against.

Mr. Holmstead said something very interesting in responding to his question from Senator Barrasso. He said that allowances keep pollution down in the power sector. Now, allowances may not be a term familiar to all the Senators, but it is a pollution credit. In English, it is the permission to pollute.

In a cap and trade program, you buy and sell allowances, you buy and sell permission to pollute. Allowances don't keep pollution down from the plant that bought the allowance. Allowances allow that plant to increase pollution.

There was a plant in Texas last year that increased its emissions by over 20,000 tons, by 54 percent over the year before. Why? It had bought allowances. Pollution got worse

around that Texas town and downwind from that plant by 20,000 tons. Allowances don't keep pollution down.

Mr. Holmstead. John, the NSR program didn't stop that, either. The NSR program doesn't stop plants from increasing their hours of operation. And you talked about allowances, there is a limit on the number of allowances. It is a limit on pollution.

Mr. Walke. If plants modify, and this bill modifies the definition of modification, and they undertake --

Mr. Holmstead. But that facility you are talking about had no modification.

Senator Barrasso. Senator Carper, you have the floor.

Senator Carper. I actually welcome the conversation, and probably would welcome it in other forums as well.

One of the concerns that was raised by the legislation is that it doesn't address pollution from coal-fired utilities, but also from thousands of other emitters. Mr. Walke, would you speak to that just briefly, please?

Mr. Walke. Yes, sir. The Trump EPA rollback would just allow power plants to increase pollution. But this bill would apply to every major industrial facility in the United States. There are thousands and thousands and thousands of them that this bill would grant permission to increase harmful air pollution. It is hazardous waste incinerators, oil refineries,

chemical plants, cement plants, you name it. So that is what informs my statement, the top of my oral statement, that this is the most harmful Clean Air bill that would worsen air pollution more than any I have seen before.

We don't need to be going backwards. This is dangerous air pollution. We know that it is deadly. We know that it causes heart attacks and strokes and asthma attacks.

Senator Carper. I am going to ask you to hold it right there. Thank you. Just a yes or no, the point that Mr. Walke is trying to make is that this goes way, way, way beyond the number of utilities that we are especially concerned about to touch on thousands of other emitters. Do you think that might be an area of some agreement?

Mr. Holmstead. Look, I think if we could do something for power plants, and if that was a compromise that we could reach, that would be great. I am not, I support the idea that you would have the same approach for other plants, because I don't think they would increase their pollution. What we are talking about is hours of operation here, hours of operation is determined by demand for product that goes up and down.

I don't think there would be an increase in pollution. But in the spirit of trying to find a compromise, if we could do it at least for power plants, that would be a step in the right direction.

Senator Carper. All right, thank you both. Thank you all very much.

Senator Barrasso. Senator Inhofe.

Senator Inhofe. Thank you, Mr. Chairman. Let me help Senator Carper out with his statistics. We have looked, and you have appeared before this committee seven times, just during the years that I chaired the committee. So maybe you weren't too far off. You are experienced here.

Let me just mention that, first of all, I thank the Chairman for hosting this hearing on the GAIN Act, important legislation we need to streamline regulatory overreach. Now, regulatory overreach goes far beyond just the subject that we are talking about today. In fact, the fact that we have arguably the best economy that we have had in maybe even in my lifetime, two things precipitated that. One was that we lowered the reduction, but also regulatory relief.

So this is something that we are very sensitive to. I can remember during the four years that you had the Office of Air and Radiation, we addressed this.

Let me ask you, Mr. Holmstead, we haven't really talked about job creation, which is one of the things that is supposed to be accomplished with the New Source Review. So respond to that, and then also how the GAIN Act reforms help job growth.

Mr. Holmstead. I think the best indication that this would

be good for jobs comes from support from the labor unions. You mentioned, I think, that there were seven labor unions, and it is mostly the building trades that are supportive of this, because they do see the projects that they would be working on that companies don't do because of NSR. And so I think that in and of itself is pretty good evidence.

I think it is very hard to come up with numbers. But because you would reduce the threat of NSR, I think you would certainly unleash a lot of economic activity, making plants more efficient.

Senator Inhofe. Mr. Alteri, I came over to introduce myself to you so I could pronounce your name correctly, and I still haven't done it.

[Laughter.]

Senator Inhofe. But anyway, as you know, the States are the primary regulator of the New Source Review program. Your testimony highlighted that since 2008, Kentucky has issued more than 25 New Source Review permits. But during that time, it appears you have also seen the program used by activists to delay important projects that would improve both environmental quality and modernization of facilities.

Mr. Alteri, would you agree that it is possible to protect air quality while also streamlining the NSR permitting? And would you agree that the GAIN Act balances those interests?

Mr. Alteri. I think it does. But I think during this conversation, it has raised issues relative to who else it would affect. But I think if you have an opportunity to improve energy efficiency at existing coal-fired units, I think you do have the opportunity to reduce pollution without triggering NSR and costly litigation.

Senator Inhofe. That is good. Thank you, Mr. Chairman.

Mr. Chairman, I might also add, we are passing around something that can be signed by some of the members for an American hero that Senator Carper had called to our attention. I will help pass that around.

Senator Carper. Thank you.

Senator Barrasso. Thanks, Senator Inhofe.

Senator Gillibrand.

Senator Gillibrand. Welcome. The Trump Administration's EPA has focused on repealing and replacing Clean Air laws with weaker standards. These rollbacks mean more, not less, air pollution falling upon communities throughout New York and the Adirondacks from coal-fired power plants in the Midwest.

New York's six million-acre Adirondack Park, its waters, forests and communities have suffered the worst acid rain damage in the United States, including the chemical sterilization of hundreds of high elevation lakes and ponds. A review of national emissions data provided by the USEPA and compiled by

the Adirondack Council shows that between 2017 and 2018, emissions of sulfur dioxide increased by more than a thousand tons at each of the 16 coal-fired power plants in 9 States whose emissions create acid rain and smog in New York.

First, Mr. Walke, what types of impacts would the GAIN Act have on air pollution levels in downwind States like New York?

Mr. Walke. Thank you, Senator. As I testified, this bill would allow very significant air pollution increases. We know that the pollution is carried by wind to downwind States. The Trump Administration has denied a pleading request from New York to protect the air quality in New York from upwind power plants.

My testimony has at the back maps of the really shocking, stunning number of coal-fired power plants in this Country today that still lack modern air pollution controls like scrubbers and those for smog. Those plants have been grandfathered, in many cases since the 1940s and 1950s. And it is in their economic interest to run longer and harder to increase air pollution and to continue to evade controls. That hurts downwind States like New York and Delaware and Maryland. It hurts the Adirondacks. This bill would make air pollution worse, not better.

Senator Gillibrand. If enacted, will residents of New York have to worry about more frequent acid rain events in their communities?

Mr. Walke. Yes, and the reason is that this bill increases

long-term annual air pollution levels of nitrogen oxides and sulfur dioxide, which contribute to and cause acid rain, as well as a number of chronic health problems from long-term exposure to these pollutants, including cardiovascular and respiratory problems, and even premature death.

Senator Gillibrand. I would like to issue a standing invitation to my Republican colleagues on this committee to spend some time with me in the Adirondacks, so you can see why these impacts would be horrible for that reason.

Mr. Walke, as you know, ground level ozone forms on hot, sunny days when pollution from cars, power plants, consumer products and other sources react with sunlight. Ozone is most likely to reach harmful levels in urban areas on hot, sunny days, and has known health effects. People most at risk from breathing air containing ozone include people with asthma, children, older Americans, and people who are active outdoors, especially outdoor workers.

What effect does increased pollution from power plants have on ozone formation and other air quality problems in States that are downwind of the emitting source?

Mr. Walke. Coal-fired power plants are one of the largest sources in the United States of a smog-forming pollutant called nitrogen oxides, which in addition to contributing to acid rain, causes respiratory problems and even premature deaths, we know

from the latest literature on ozone. We know that the downwind States are suffering from air pollution that they cannot control from big power plants in the Midwest and upwind in the southeast as well.

Another dirty little secret of the Clean Air Act, I am afraid, is that even plants that are equipped with these controls are allowed to turn them off after they are charging customers for these controls that they are allowed not to operate, including on summer days when there are very high ozone levels that hurt New Yorkers.

Senator Gillibrand. Can you expand on the public health implications for people in States like New York?

Mr. Walke. Yes. Again, we know that some of these types of air pollution, fine particle pollution in particular, are unsafe at any level. So that even in areas that are nominally meeting these standards, people are dying, people are suffering heart attacks and strokes. Parts of New York have some of the highest asthma rates of anywhere in the Country, which affects children in particular.

Then of course, we have a lot of very toxic pollutants like mercury and lead that come from these power plants that are landing in waterways. It is a full suite of health problems that Americans are still suffering, especially from these large, uncontrolled and poorly controlled coal plants.

Senator Gillibrand. Thank you, Mr. Chairman.

Senator Barrasso. Thank you so very much.

Senator Braun.

Senator Braun. Thank you, Mr. Chair.

Number one, I think the discussion we are having is pertinent in the sense that next to the cost of health care needing to be fixed in an industry that is digging in and fighting almost everything we are doing to try to help them fix themselves. I see a pattern of proactivity and interest among the industry.

I think this is a point that can be confusing the most, in the sense of, if you become more efficient, isn't it close to a zero-sum game in the sense that in this one plant, if you are more efficient, and this is directed at Mr. Holmstead first, then I would like Mr. Walke's response. Wouldn't you be at least holding your own in terms of emissions? Because demand has been relatively flat, given how fast the economy has grown for electricity anyway.

So I know that if you would run it more, that particular plant would be emitting more. But if you are running less efficient plants less, isn't it close to a zero-sum game when it comes to emissions?

Mr. Holmstead. Thank you for making that point. As you say, the amount, the number of hours these plants run depends on

the demand for electricity, which has been very flat. So if one plant becomes more efficient and runs more hours, that means that another plant is going to run fewer hours. You would have to look at the emission rate of each plant to see. But in general, you would expect an overall reduction as you start to shift generation to more efficient plants.

Mr. Walke?

Mr. Walke. Senator, that could be an area of reasonable compromise. If a plant is going to keep its production flat, there are mechanisms in the law where it can agree to do so, and it won't increase dangerous air pollution. That is a reasonable outcome. If it doesn't increase dangerous air pollution, it won't require pollution controls, so it can become more efficient, as you posited. But it can also fail to increase dangerous pollution.

Unfortunately, that is not what this bill does. So if there was interest on your part in changing the approach in the bill to make clear that plants can become more efficient and not increase dangerous air pollution by agreeing to limit to the demand that you acknowledge has been flat, that is a very sensible outcome.

Senator Braun. I think that might occur somewhat naturally, even without a provision. Because I don't see utilities producing more than what the demand is. That has been

relatively flat. So maybe that is something that would be a pleasant outcome without needing a requirement.

Next question. Regardless of what we do here, and anything impacting climate in the U.S., what do you see, and any of the panelists, feel free to jump in, what impact does this have on the world in terms of our impact and percentage, if India and China keep on the trajectory they are on? So if we do things that cost a lot in the present, which is the biggest variable in any financial analysis, what you spend today, anything that you accrue in terms of benefits is somewhat of an estimate.

What is the best kind of number out there of how this impacts what happens around the world? Because we breathe an atmosphere that diffuses across the world.

Mr. Alteri. In Kentucky, we are a manufacturing State. So if you drive up electric prices artificially, or through these regulations, then you would end up shifting that demand, that manufacturing to countries that do not have the environmental laws that we have. We have had significant emission reductions. I think you would lose that gain if you end up shifting jobs to even Mexico.

Mr. Walke. Senator, I would make two points. In the mid-1970s, the United States was a world leader in removing lead from gasoline. That saved a tremendous number of lives and avoided misery in this Country.

That U.S. leadership spread to countries around the globe. And now we don't have lead in gasoline in most countries in the world. That is the type of American leadership that we need to confront the climate crisis.

You are correct, if India and China do not reduce their emissions, then we are in big trouble. But America needs to get its house in order first, and address the problems that we have control over, and to negotiate and to work with other countries. That is what the Paris Climate Accord was trying to do, and we know that this Administration has stepped away from that.

I support your call for American leadership and exporting American ingenuity to countries around the world.

Senator Braun. Very good. I do want to announce that I am the first Republican to join the bipartisan Climate Caucus. We now have three or four others as well. I think this capsulizes really in a good fashion the discussion.

I believe if we are not having it, we have seen a little bit of commonality in terms of even the NSR and other discussion of how this is a global issue as well. I believe that it is going to be the driving issue over the next couple of decades. So I am glad to see folks of different points of view still seem to be zeroing in on the same outcome. Thank you.

Senator Barrasso. Thank you, Senator Braun. Senator Van Hollen.

Senator Van Hollen. Thank you, Mr. Chairman. Thank all of you for your testimony today.

Senator Cardin and I are both from the State of Maryland. Maryland is a downwind State. We suffer from some of the same issues you heard from Senator Gillibrand.

In fact, in November 2016, Maryland filed a petition concerning air pollution generated by 36 power plants located in Indiana, Kentucky, Ohio, Pennsylvania, and West Virginia. The point of that petition was that that pollution coming from those States was making it harder for Maryland to meet its air quality goals, and causing more health risks in the State of Maryland.

So we filed a petition with the EPA in September of last year. EPA denied Maryland's good neighbor petition. That has been appealed by our attorney general. So this conversation is important to Maryland, like other States as well.

Mr. Walke, I am trying to understand one thing. I understand that the NSR only applies to existing sources if a facility wants to make changes that will significantly increase its aggregate annual pollution. Is that right?

Mr. Walke. Correct.

Mr. Van Hollen. So maybe I misunderstood you, Mr. Holmstead. I thought I heard you say that you would bet Mr. Walke that these changes would not increase the annual emissions at a plant that took advantage of the changes you are proposing.

Did I misunderstand you?

Mr. Holmstead. What I said is, power plant emissions in the United States would not increase. Total power plant emissions would continue to decrease. At an individual power plant, emissions increase and decrease all the time, every year they increase and decrease.

Senator Van Hollen. Right.

Mr. Holmstead. But the law here only triggers if there is a --

Senator Van Hollen. Let me just make sure I understand. As I understand it, this law only applies if air pollution generated at the particular plant in question will increase. Isn't that true, just yes or no? Is that true.

Mr. Holmstead. No.

Senator Van Hollen. It is not true?

Mr. Holmstead. It is more complicated.

Senator Van Hollen. Mr. Walke, could you --

Mr. Holmstead. If you would let me answer.

Senator Van Hollen. I only have a certain amount of time. You said no; I want to hear what Mr. Walke has to say.

Mr. Walke. The answer is absolutely yes, absolutely yes.

Mr. Holmstead. How many cases are there were there has been an NSR enforcement action against a plant that has reduced its emissions?

Senator Barrasso. Senator Van Hollen --

Senator Van Hollen. Mr. Walke --

[Simultaneous conversations.]

Senator Barrasso. We will have a second round.

Senator Van Hollen. Mr. Walke, could you explain your answer to that question?

Mr. Walke. Yes, the law says exactly what you said, Senator Van Hollen, only if a change in a facility increases emissions significantly in tons per year from that plant. What Jeff's answer reveals is that on balance across the entire United States, the power sector's pollution will go down. That is no consolation to someone living next to a plant that has its pollution increase by 10,000 tons per year.

Mr. Van Hollen. And it is no consolation, frankly, to Maryland, if the plants in question are the plants that are causing pollution to drift to Maryland and impact air quality in Maryland.

Mr. Walke. That is correct.

Senator Van Hollen. That is what I thought, which is why I thought the bet was a little strange, you are just betting that overall pollution from power plants will go down in the United States. There are lots of reasons for that. But the whole purpose of this law is directed at the particular power plant. And I understand, Mr. Walke, if you want to do a deal with him

where you can guarantee in advance that another power plant may be owned by the same company is going to reduce its air pollution by more than compensated, maybe that is a discussion we should have.

But let me just, I understood you earlier, Mr. Walke, to point out that, trying to frame this bill as a clarification of existing law obviously flies in the face of the facts, right? If EPA thought, this current EPA, the Trump Administration EPA, thought that this was compliant with the law, wouldn't they have included this in their most recent revisions to the Obama Power Plant Rule?

Mr. Walke. Yes, sir. They clearly failed to finalize that rule because they were getting advice from lawyers at EPA and the Justice Department that it was severely problematic.

The first half of this bill essentially kind of replicates what the Trump EPA is doing, and has just sentence after sentence after sentence that Congress is adding to the law to make clear that you can only change the law by amending the law. The second half of this bill is frankly so extreme by allowing unlimited pollution increases in the name of reliability that not even the Trump Administration was audacious enough to claim that that was allowed under current law.

Yet this bill calls that too a clarification of the law. Frankly, it doesn't pass the red nose test.

Senator Van Hollen. Thank you. Thank you, Mr. Chairman.

Senator Barrasso. Thank you, Senator Van Hollen. Senator Capito.

Senator Capito. Thank you, Mr. Chairman, thank all of you for being here.

Mr. Holmstead, I am going to give you a chance to respond, because I understand it is more complicated. But I want to say a few things before I turn the floor over to you. First of all, I am a cosponsor of the GAIN Act. I think because we have a bipartisan, we have several bipartisan pieces of legislation here that are incenting carbon capture and utilization with the dual purposes of preserving economy and also cleaning the environment at the same time.

I was going to ask you to respond to what Mr. Walke said. But the way I understand this is, if you add on and make a significant investment with the goal of reducing your emissions, and you are more efficient, that it would stand to reason that you would be more economical and so your plant would be running more, more time, putting out more production. Therefore, maybe your per unit emission is less, but your overall emission may be more, because you are running more efficiently.

Wouldn't we rather have, since we are, like the Senator from Indiana said, you are only going to go to a certain demand, wouldn't we rather have the more efficient, cleaner plants going

than having the less efficient plants keeping their steady production numbers, but adding to the emission count at the same time? Am I understanding that right, and if you could --

Mr. Holmstead. No, no, absolutely. You have explained it better perhaps than I did, and that is yes, a more efficient plant would likely run more hours. But that would mean that other, less efficient plants run fewer hours. And so on an overall basis, you would expect pollution to decrease.

Now, as I stated before, plants increase and decrease their annual emissions all the time, based on demand, based on whether other plants in the area are out of service. And the NSR program doesn't stop that. But we have all kinds of other laws in place to make sure that those variations we see on a year to year basis don't adversely affect public health.

Senator Capito. Okay. Another question I have, in your testimony, and this is conflicting, I think, information that we have heard in the testimony. You say emission reductions have dramatically improved the quality of the air that we breath. Nobody is pro-pollution. Let's take that off the table. But according to the EPA's Air Trends Report, since 1990, national concentrations of air pollutants have improved 89 percent for SOX, 80 percent for lead, 74 percent for CO, and 57 for NOX and 21 percent for ozone.

So we are trending down. Is that a correct interpretation

of what your testimony is?

Mr. Holmstead. Yes, no, absolutely. Air quality improvements over the last 30 years have been pretty dramatic throughout the Country. It has been really a remarkable achievement that is attributable to the Clean Air Act.

Senator Capito. Well, as for one of those States that the Senator from Maryland is, I guess he is downwind from West Virginia, and he is lucky to be there.

[Laughter.]

Senator Capito. But this is an argument, obviously, also being from a coal-producing State. So in order to get to that goal of keeping our coal miners working at least efficiently to get to that CCU goal, we have to keep moving forward, I think, with encouraging the investments that are going to keep it, make it more efficient, number one, well, maybe not number one, they are tied. More efficient and more environmentally correct, and improving that and lowering the emissions. So that to me is the whole point of the GAIN Act.

I want to ask Mr. Alteri, from Kentucky, you highlight the fact that Kentucky was repeatedly sued regarding permits touched off by the NSR program over the past decade. Do you feel that uncertainty about the convoluted way that the NSR regulations and guidance are drafted is contributing to these lawsuits?

Mr. Alteri. I think implementation of the rules and I

think it has been highlighted. So if you were to replace a turbine and then you run the unit more, then you are going to increase more than 40 tons per year, and that would trigger NSR. And it is that improvement in energy efficiency of the turbines that has been the subject of the litigation between these two.

Senator Capito. But at the same time, while you are improving the efficiency of the turbine, I am going to assume that you are cutting emissions at the same time.

Mr. Alteri. Per megawatt hour, yes, ma'am.

Senator Capito. Yes, all right. Thank you, Mr. Chair.

Senator Barrasso. Thank you. Senator Cardin.

Senator Cardin. Thank you, Mr. Chairman. I also appreciate all the panelists and this hearing.

Senator Capito, our constituents breathe exactly the same air, our border is so intertwined. Sometimes I don't know whether I am in West Virginia or Maryland. So we share a similar goal.

I was intrigued by Senator Braun's questioning on trying to reach some agreement here. I think the confusion, as I understand it, is that yes, you can make an individual power plant more efficient as far as its production and pollution. But if the total mix in the region is increasing because that plant is not doing what it should be doing, the overall impact is dirtier air. That is how I understand the dilemma we are in.

So perhaps we have something going on an individual plan if it doesn't increase its capacity but reduces its emissions, that may be an area where we could reach some type of an accord, if I understand what Mr. Walke is saying.

I want to follow up, though, on the point that Senator Van Hollen made. That is, we are a downwind State, Maryland, there is no question about it. The Clean Air Act gives us the opportunity to challenge when there is pollution coming from a different State, it affects our ability to comply with the National Ambient Air Quality Standards.

So my concern, and I want to get, Mr. Walke, your view on this, is that this legislation would make it more difficult for Maryland to challenge another State's activities in regard to Maryland's meeting our air quality standards. Is that a concern I should have?

Mr. Walke. You should, because that is completely correct. This bill would authorize those pollution increases, and say they are just fine to occur under the law. Maryland is helpless to control that increased air pollution that is occurring in Indiana or another upwind State.

So the burden that falls on Maryland is to crack down on pollution sources inside Maryland's borders that are not responsible for the problem. Maryland has turned to the EPA to plead for help, and they have consistently denied those

requests. Now we have two court decisions just within the past two months that have struck down the Trump Administration's approach to failing to protect downwind States. They have denied Maryland's petition based upon one of those faulty legal defenses that the courts have said is insufficient.

So we need leadership that will protect downwind States, because the current EPA is not doing so. The Trump EPA rollback will make things much worse, and this bill would as well.

Senator Cardin. I appreciate that answer. We do have our challenges, there is no question, with the regulatory activities of the EPA. Giving legal justification to some of this through this bill will make it, as you say, more challenging.

I want to get to a statement that you made that really has me concerned. I looked at your map, I looked at all the coal-burning plants. I saw how they are surrounding my State. Then you said many still don't have the scrubbers and the modern technology to make them as efficient as possible. You said that this legislation may even make it more challenging for those types of improvements to be made.

Can you just elaborate as to why you believe we haven't made more progress in cleaning up those plants?

Mr. Walke. Sure. When Congress adopted this New Source Review program in 1977, older plants before that date were grandfathered. And they were only required to install modern

pollution controls when they undertook modifications. That is the subject of this bill. Not new plants; there is agreement that new plants have to install controls, and I think some of the challenges that Sean may have been facing were from challenges at new plants. That is not what this bill is about.

So what this bill does is say to those grandfathered power plants that still lack controls after being built in the 1930s, 1940s, 1950s, and 1960s, that you can continue to run forever without installing modern pollution controls. You can overhaul your facility and extend its life by 20, 30, 40 years without ever installing controls. That to me is just indefensible in America in 2019.

Then the bill extends it to every industrial facility in the United States. So again, it is going to make air quality worse and air pollution problems worse, not just in downwind States, but in the State where these grandfathered plants are continuing to operate uncontrolled.

Senator Cardin. Thank you. Thank you, Mr. Chairman.

Senator Barrasso. Thank you. Senator Markey.

Senator Markey. Thank you, Mr. Chairman, very much.

The Clean Air Act has been cleaning up America's air since 1970, and would cut down on dangerous toxins like lead and mercury and particulates in the air, improving the health of millions of people across the Nation.

The Clean Air Act's New Source Review program is key to improving our air quality standards. Any attempts to weaken the New Source Review pose a major threat to public health, but would be a big win for dirty coal and energy facilities that want to be able to put as much pollution into the air as they want.

Mr. Walke, does the New Source Review program successfully help to control emissions increases that threaten the health of communities around sources like power plants?

Mr. Walke. It does. I want to make a point that the role of the New Source Review plays in the Clean Air Act is to serve as a sensible constraint on runaway pollution increases. If we can't agree that industry should not be able to increase air pollution wildly, then that is a problem. So New Source Review, I think of it like an iceberg. Seven eighths of an iceberg is below the surface. Seven eighths of the benefits of New Source Review are preventing runaway pollution increases. That is what this bill is trying to attack.

Senator Markey. I agree with you. Unfortunately, the Growing American Innovation Now Act, the GAIN Act, would allow facilities to emit more dangerous pollutants and toxins, carbon monoxide, sulfur dioxide, even mercury and arsenic. Mr. Walke, is it true that under the GAIN Act, a facility could essentially have an unlimited license to pollute?

Mr. Walke. It is, under this bill. Mr. Holmstead is correct that there may be constraints on unlimited emissions increases in some cases. But there is nothing in this bill that limits air pollution at all, not even a comma.

Senator Markey. So I was trying to think of an analogy. Say you smoke one cigarette per day. So you smoke 365 cigarettes a year. And your doctor says, well, that is okay, one a day. Cigarettes are bad, but keep it to one a day, your health might be okay.

But you are physically capable of smoking 10 cigarettes an hour. Under the GAIN Act rules, applied to cigarettes, you would be able to smoke 10 cigarettes an hour, 365 days a year, 87,600 cigarettes in one year.

Mr. Walke. That is correct.

Senator Markey. Not 365, but 87,600 cigarettes, before your doctor would be able to tell you to stop, the doctor here being the EPA. So if you can smoke 87,600 cigarettes a year, it is probably going to hurt your health.

Mr. Walke. That is right.

Senator Markey. It is probably going to hurt your lungs.

Mr. Holmstead. I will agree with that one.

Senator Markey. Thank you, Jeff. And that is really what the problem is, that it just opens up this huge loophole. Unfortunately, smokers need some limits, because we know that it

causes cancer. And the children of America, would could contract asthma, pregnant women, they need protections as well. So this just blows open all the protections.

The analogy with cigarettes is something that, from my perspective, is just so easy to understand, that instead it is just going to be going out of smokestacks into the lungs of people all across our Country. And the bill would authorize that massive pollution increase.

We need a cleaner air future, not to go back in time. Four out of ten Americans are living with unhealthy air right now. Minority and low-income communities are disproportionately affected by air pollution. African Americans have a 54 percent higher health burden in areas affected by air emissions, like soot. The Trump Administration's EPA has been hard at work trying to dismantle air quality protections across the board.

Mr. Walke, again, do you agree that the GAIN Act would mean that both new and old facilities, coal plants and other power plants, could emit more life-threatening pollution?

Mr. Walke. Absolutely. As Senator Van Hollen led Mr. Holmstead to acknowledge, individual power plants, individual facilities that number in the thousands across the United States would be allowed to increase pollution under this bill.

Senator Markey. So let me ask you one quick question, Mr. Walke. Massachusetts doesn't have any remaining coal plants

operating. You testified to the downwind impacts of the GAIN Act in New York in response to Senator Gillibrand. Can you tell me what the impact of the GAIN Act would be on the air quality of residents of the Commonwealth of Massachusetts?

Mr. Walke. Senator, if anything, it would be worse. New England, Maine, Massachusetts, are often referred to as the end of the tailpipe in the United States. So the wind patterns are carrying dangerous coal plant pollution from the southeast and the Midwest directly into the Commonwealth's back yard.

Senator Markey. Right. So if we weaken the Clean Air Act with legislation like the GAIN Act, existing facilities in every State could use loopholes to spew out 20,000 tons per year of nitric oxides, 200 times what is allowed for new facilities, and that pollution would be allowed in Massachusetts and would travel downwind to the Commonwealth of Massachusetts from other places, just blowing the smoke, blowing the smoke like a father smoking a cigar in the front seat, and it is just blowing to the three kids sitting in the back seat, but the father is going, hey, I am not responsible for the impact on kids, in the car with the windows up.

Well, that is what happens with the wind blowing toward the east coast, toward Massachusetts and other States. We are the ones that have to inhale this dangerous and unnecessarily permissive new law that is being proposed. So I thank you, Mr.

Chairman, thank you for the opportunity to be able to question the witnesses.

Senator Barrasso. Thank you very much. Senator Cramer.

Senator Cramer. Thank you, Mr. Chair, and thanks to all of you for being here today.

I would ask your forgiveness for my tardiness. I preside over the Senate Wednesday mornings. I thought it seemed like a good idea when I picked that time. Unfortunately, I miss the first hour of some really good hearings. But thank you all for being here.

Absent that first hour, I am just going to throw a couple things out, maybe, to facilitate some discussion, if that is okay. I think some of you know, maybe all of you know that I was a regulator for 10 years in North Dakota on the Public Service Commission where we had very broad as well as very deep regulatory authority over lots of things, not just economics, but environmental siting and all of that.

One of the challenges, one of my frustrations with NSR has always been what seems to me to be what seems to be a perverse incentive, away from innovation that would actually be applied, especially to existing facilities, in the form of modifications that would actually be cleaner but the incentive is to not do it, as per the NSR. I am sure you have discussed some of that.

But let me just throw it out, along with that frustration.

There has to be some bipartisan, wide-ranging solutions that don't perversely incent the wrong activity. Assuming, and I think we can, that we all support cleaner energy development, and lowering of emissions, particularly pollutants of all types.

Do any of you or all of you have just an idea for us, whether it is the GAIN Act, and I support the GAIN Act in fact I will be a cosponsor of it, to try and bring clearer definition to terms. But is there something we can be doing together that Senator Carper and I can agree on? Because we tend to agree more often than people might think.

What are some of your thoughts that anybody could share with us as to how we might be able to get to the goal that we all share? Is that fair?

Mr. Alteri. Senator, in my testimony, I offered to narrow the scope even further to just existing coal-fired generating units. That is a known universe, it is not going to grow. If they were to add a new unit at that existing plant, it would go through NSR. And then do not ignore how beneficial the Cross-State Air Pollution Rule is. We are talking ancient history when we are talking about tailpipes and downwind States and this thing. Mobile sources are your problem, marine vessels are your problem in the northeast.

Kentucky, I don't know that air quality phenomenon that allows emissions from Kentucky to leap over West Virginia and

then fall down in one concentrated area in Hartford, Maryland. I just don't know how that works. I really think that marine vessels, mobile sources, peak demand generators that are operated on high ozone days, those are the focus, and maybe we should focus in that arena.

But as far as narrowing the scope of this legislation, you can do it with existing sources. But do not ignore the great benefits. The Cross-State Air Pollution Rule, we talked about allowing areas that are more concentrated in pollutants. Well, the 2017 update narrowed that to States. Those allowances are narrowed to the State. So Kentucky cannot emit more by buying allowances from Georgia or Indiana or somewhere else. That is old, ancient history.

Senator Cramer. Mr. Holmstead, I know you are very familiar with Petra Nova, I think you referenced it in your testimony as well. That is one that we are fairly familiar with up in North Dakota as well. Is there a way to do this that we all --

Mr. Holmstead. So you raise an interesting point, that if we really do want coal-fired power plants to install carbon capture and sequestration, coming up with some way to help them do that without having these regulatory hurdles, burdens like NSR, I think would be a good thing. And maybe that is an area where we could come up with some sort of an increase, because

everybody, I believe, supports that kind of an approach. I know from the Petra Nova experience that NSR was a huge impediment.

The other thing I would offer, and we talked a little bit about this before you were able to get here, is defining energy efficiency improvements in a way that everybody would be comfortable with. Boy, I just don't know why you would want to have this regulatory hurdle for people who want to improve the efficiency of their facilities. Sean mentioned an issue that has come up in a number of cases, that is, you can now buy more efficient turbine blades for coal-fired power plants. But if you do, you trigger NSR.

Senator Cramer. Yes.

Mr. Holmstead. So the cost and the expense of triggering it, no one wants to go through that, and as a result, you have people passing out these energy efficiency opportunities.

Senator Cramer. I know my time is running, but I would feel incomplete if I didn't hear from you, John.

Mr. Walke. Thank you, Senator Cramer. That is very kind of you.

Senator, I don't have a specific idea, but I think most Americans think that there is a pretty simple, common sense question that should be answered: will any reform let plants pollute more after the reform than they did before. And if the answer to that is yes, then maybe we should look for other

solutions.

We are in agreement that greater efficiency is a good thing, less pollution, less carbon pollution is a good thing. But I think we need to look elsewhere for solutions, since the answers at this hearing are so clear today that this bill will let plants pollute more. So maybe that is just not the solution that we need to try to find a compromise around.

Senator Cramer. Thank you. Thank you, Mr. Chairman.

Senator Barrasso. Thank you very much.

Senator Carper.

Senator Carper. I thank you.

Before my colleague is going to have to leave, I circulated earlier today a card to send to an Army Ranger who was almost killed in Afghanistan two months ago today. If you would have a minute to sign that before you go, that would be great. Thank you.

Mr. Chairman, as I mentioned to you, I have three unanimous consent requests to make here. I will just do it right now, if I may. I would like to submit for the record data from this Administration that shows air pollution, including carbon pollution and energy consumption in our Country are increasing, not decreasing.

Senator Barrasso. Without objection, so ordered.

[The referenced information follows:]

Senator Carper. The second one, I would like to ask unanimous consent to submit for the record a letter opposing the GAIN Act by the Clean Air Task Force and the Sierra Club. The organizations caution that if this bill were enacted, it would, "allow enormous increases in air pollution, thereby seriously endangering public health and the environment," and completely eviscerating the Clean Air Act New Source Review.

Senator Barrasso. Without objection, so ordered.

[The referenced information follows:]

Senator Carper. And one more, this is a broader request. I ask unanimous consent to submit for the record several materials, including studies, reports, letters, and more from the renowned public health organizations of former EPA officials that show how the GAIN Act and previous and current proposals by Congress and EPA actually weaken the Clean Air Act by attempting to completely restructure New Source Review, ultimately harming our health and the environment. That was a long sentence.

Senator Barrasso. Without objection, so ordered.

[The referenced information follows:]

Senator Carper. Thank you.

A question, if I could, again, our thanks to all of you for being here, and some of you who have been here many times, for being here today. Mr. Walke, if I could, Mr. Holmstead's testimony also says that the test for an increase in emissions would be the same for New Source Review as it is for the Clean Air Act's Section 111 New Source Performance Standards provision.

Would you take a moment and speak about the differences between these two programs, and describe why Congress found it necessary to add the New Source Review program in the Clean Air Act Amendments of 1977?

Mr. Walke. Yes, Senator Carper. The New Source performance standard that you are referring to was and is viewed to be unsuccessful at reducing pollution or even constraining pollution from individual plants. So Congress added the New Source Review safeguards in 1977 to complement the NSPS program. The New Source Performance Standard program is focused on federal technology standards, but it doesn't prevent wild increases in emissions that can hurt people from actual plants. So that is why we have New Source Review added to the law.

What this bill would do is effectively eliminate New Source Review and replace it with New Source Performance Standards that allows plants to increase pollution up to their worst possible

polluting hour in ten years, and obviously doesn't protect people living around specific plants or protect people living in downwind States.

Senator Carper. All right, thank you.

Mr. Alteri, where do you live in Kentucky?

Mr. Alteri. Lawrenceburg.

Senator Carper. Where is that?

Mr. Alteri. It is in between Louisville and Lexington; it is the home of Wild Turkey and Four Roses.

Senator Carper. Are those dairy products?

[Laughter.]

Mr. Alteri. They will make you feel better.

[Laughter.]

Senator Carper. My sister lives just south of there, in Winchester. I will mention that you were here.

My question for you, I think it was in 2012, Kentucky's power plants were some of the largest emitters, as you will recall, of mercury and other toxic pollutions, I think, in our Country. In your written testimony, you state that coal plants in Kentucky have greatly reduced their emissions, in part due to regulations promulgated under Section 112 of the Clean Air Act, also known as the Mercury and Air Toxics Standard rule, or MATS.

Would you oppose any efforts to undermine MATS today?

Mr. Alteri. I would.

Senator Carper. Thank you very much.

And Mr. Holmstead, a closing question, if I could, for you as well. In 2012, while you were running the EPA Air Office, EPA expressly rejected a change to NSR based on the maximum hourly emission rate. The George W. Bush EPA, I am told, warned that using such a test "could sanction greater actual emission increases to the environment, often from older facilities, without any preconstruction review," and that such an approach "could lead to unreviewed increases in emissions that would be detrimental to air quality."

My question, Mr. Holmstead, is not a gotcha question, but I am just wondering, were you wrong then, or do you think you might be wrong today?

Mr. Holmstead. So let me be clear. We never rejected the, what, this approach. We didn't adopt it. But I have, and I have to say, I was amused to read Mr. Walke's quotes. What I will say is, you emphasized the right words there, that something like this could allow increases, or might allow increases.

What we know from the real world is that they would not. Or it is highly unlikely that they would. So if we lived in a world where NSR was the only regulatory program that applied to existing facilities, if that were the case, then I would agree that this bill could allow pollution increases. Although again,

the amount of pollution is not a function of these.

What we are talking about is hours of operation. And hours of operation depends on demand for your product, right? Plants don't exist so that they can maximize their pollution, they exist so they can sell things to people. So whether you are talking electricity or widgets, that is ultimately what determines the hours of operations that people run. Whether or not you modify, whether or not you become more efficient, all those things, are constrained by demand.

Going back to your question, though, if the NSR program were the only program and if demand were essentially unconstrained, then yes, this would allow more pollution. But we don't live in a world like that. We live in a real world. And I have to say, I care a lot about air pollution. But I also care about doing it in the right way.

And we have learned a lot over the years. And the NSR program is just not a very effective way to reduce air pollution. It is good for new sources, because they are required to install pollution controls, that is what Sean said. It is good when someone is going to expand a source, because it is part of that process, you are required to install pollution controls.

But playing this game of gotcha with existing sources when they replace a component and we try to get them to trigger NSR

has proven not to be a very effective way. And it creates sort of the wrong incentives.

Senator Carper. Thank you for that.

John, take just 30 seconds to close us out, please.

Mr. Walke. Sure. Just two quick points. Despite these general reassurances from Jeff, let me emphasize that he has not identified a single law in the United States that would limit increases in actual emissions from thousands of plants that this bill covers the way that the NSR modification program does.

The second point I would make is that Jeff's enforcement colleagues down the hall in the Bush Administration identified plant after plant after plant that had increased emissions under the test that EPA rejected. There was nothing theoretical about it. The air got dirtier and people got sicker.

Senator Carper. All right, thanks.

Mr. Chairman, this is not a new issue, as we said already. And it is one we have been talking about, arguing about, discussing for a long time. Your legislation, if nothing else, sort of gives us an opportunity to revisit and maybe to have the start of a productive conversation. I am not sure, but we will see. Thank you.

Senator Barrasso. Thank you very much, Senator Carper.

Mr. Alteri, at one point, Mr. Walke was making an answer to something related to whether it was a new source or an old, and

you shook your head no about what had happened in Kentucky. I don't recall the specifics of that. Is that something you would like to clarify?

Mr. Alteri. Mr. Walke was absolutely correct on two new units, they were coal gasification projects, and they were located right there at the mines. So I think you are reducing your carbon footprint by having that direct access to local fuel sources.

The other actions related to improvements that exist in facilities. It also included when you put on a scrubber and you have a selective catalytic reduction strategy with ammonia injection, it creates sulfuric acid mist. So that triggers NSR as well, even though you are having a 95 plus percent reduction of SO₂, just because of the chemistry and the atmosphere chemistry, you are going to increase sulfuric acid mist. There is no way to control it.

If you limit your sulfur content in coal, then I think that would be an opportunity to make NSR reforms where you are not going to cost litigation costs, as well as going through the permitting process for something that is a pollution control project.

Senator Barrasso. Thank you. Mr. Holmstead, Mr. Walke had described the GAIN Act as creating a license to pollute. Could you comment on the accuracy of that statement?

Mr. Holmstead. Well, you won't be surprised that I disagree. What this rule would do was remove the threat of triggering NSR that discourages a company from doing the things that we should want them to do. We should want them to maintain their facilities. If your boiler tubes wear out, you ought to be able to repair your facility and return it to the way that it was. If you want to improve the efficiency of your facility, why in the world do you want to have this permitting requirement that is cumbersome, that takes a long time, that can be very expensive? Why do you want that?

We have all these other regulatory programs that protect air quality, and this one has just not worked very well when it comes to, if you are trying to get plants to actually reduce their emissions. It just hasn't worked. And so I am frustrated because I see that we are, as a Country, and this is a small part of our economy, but it is nevertheless very important. And you talk to manufacturing facilities, you talk to anybody, and they say, NSR is a significant problem. And I just wish that we had some way to fix it. I think this act would be a very sensible way to do that.

Senator Barrasso. Well, thank you all. The committee has received a number of letters in support of the GAIN Act from a number of groups, including the National Association of Manufacturers, the Portland Cement Association, the American

Forest and Paper Association, the International Brotherhood of Boiler Makers, the Pennsylvania Chamber of Business and Industry. Without objection, I ask unanimous consent to enter these letters into the record. And it is so done.

[The referenced information follows:]

Senator Barrasso. We have heard from our witnesses. I want to thank all of you for being here with your testimony.

There are no more people to ask questions today at the hearing, but they may submit written questions. So the hearing record will remain open for two weeks.

I want to thank all of you for being here, we are thankful for your time. Thank you for your testimony.

[Whereupon, at 11:41 a.m., the hearing was adjourned.]