

**EXAMINING THE LOCAL IMPACTS OF EPA'S
CLIMATE REGULATIONS**

FIELD HEARING
BEFORE THE
SUBCOMMITTEE ON CLEAN AIR
AND NUCLEAR SAFETY
OF THE
COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
ONE HUNDRED FOURTEENTH CONGRESS
SECOND SESSION

OCTOBER 5, 2016—LOGAN, WV

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WEDNESDAY, OCTOBER 5, 2016

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON CLEAN AIR AND NUCLEAR SAFETY,
Logan, WV.

1 SENATOR CAPITO: So welcome and good
2 afternoon. This hearing will come to order. I like
3 that part.

4 Anyway, again, I'd like to thank the
5 witnesses and my colleagues for being here today. And
6 this is a very important hearing, and it's very
7 important that we're in Logan County, West Virginia, one
8 of the most deeply affected parts of our country on the
9 topic that we're going to talk about.

10 Last week the United States Court of Appeals
11 for the District of Columbia heard the oral arguments on
12 the legality of the EPA's Clean Power Plan which as you
13 might recall -- and I think some of the testimony
14 reinforces this decision -- this power plan was stayed,
15 which means it was halted by the U.S. Supreme Court in
16 February. Afterward, Attorney General Patrick Morrisey
17 and Senator Manchin and I and others had a press
18 conference on the grounds of the United States Capitol
19 to talk about this case.

20 While we are understandably focused on the
21 projected impacts of the Clean Power Plan, it is
22 important that we hear from both sides and all sides
23 about this issue. Coal industry bankruptcies caused at
24 least in part by regulations -- and this is a discussion

1 that I had on the radio this morning and that we have
2 quite a bit -- is it all about the regulations? No.
3 It's not all about the regulations. Is it about -- all
4 about natural gas? No. It's not all about natural gas.
5 Is it all about market forces? No, it's not.

6 Each one of those I believe plays
7 individually a very strong part in what we see happening
8 to our coal industry. I'm also working hard with my
9 colleagues here and others from West Virginia to make
10 sure that the UMW Health and Pension Fund is restored
11 for those miners who are set to lose their healthcare at
12 the end of the year.

13 We worked it I think very well through the
14 committee. Senator Manchin's the main sponsor; I'm the
15 cosponsor of the bill. And Congressman Jenkins has been
16 fighting hard on the House side. So we see some blue
17 sky there, although the end of the year we are going to
18 have to really put the big press on which we will.

19 You know, coal jobs are good jobs. There
20 are many coal miners in the audience today. The Bureau
21 of Labor and Statistics puts the average miner's wage at
22 \$84,000 a year which is much higher than our average
23 here in West Virginia of \$39,000 of a non-mining annual
24 salary. Coal jobs also support other jobs, and I don't

1 think they get talked about enough or as much. Every
2 vendor in the supply chain is affected. For every one
3 job, seven other jobs are affected.

4 Coal miners out of work have less disposable
5 incomes to spend in their communities. You could ask
6 any vendor here in Logan County and they can say how
7 affected they've been by this downturn.

8 And so today we will hear from Gene Trisko
9 who I've had the pleasure of meeting and hearing
10 testimony from Mr. Trisko before. He will talk about
11 the impacts of the Clean Power Plan just on West
12 Virginia, including I believe it's a relatively new
13 report that is out that shows a loss of 47 -- a
14 potential loss of \$47 billion just in the State of West
15 Virginia over the life -- or I think it's to 2040 is
16 the -- it's a projected.

17 We'll also hear from Bob Pasley who's our
18 Wayne County Commissioner to talk about the effects in
19 our local county commission. And then Bo Copley, who's
20 our coal miner who has been affected by this downturn.
21 We'll also hear from Ms. Ireland and Mr. Van Nostrand
22 about their position and their opinions on where and how
23 we should be moving forward.

24 So I'm going to leave it there. I think

1 I've been very frustrated with the EPA as many of us
2 have been. One of the most frustrating points for me
3 was in questioning Janet McCabe, who is the EPA acting
4 assistant administrator, about why EPA had not conducted
5 any of their listening sessions -- any of their
6 listening sessions in the State of West Virginia when
7 they were drafting the Clean Power Plan. And the
8 response I got from her was pretty startling.

9 She basically said, "Well, we went to
10 Pittsburgh," and that -- which shocked me enough, but
11 then she continued and she said, "EPA wanted to have
12 these discussions in locations where people were
13 comfortable."

14 That to me says that they weren't ready to
15 face what we're going to be hearing a lot of what we're
16 hearing today and some of the folks in the audience.
17 Well, we're here. We're here listening. We're making
18 this part of the public record. We're making this so
19 that our colleagues in the House and Senate that
20 we've -- that disagree with the direction that we want
21 to go and we disagree with the direction they want to
22 go, they know how we feel and how you-all feel. You're
23 putting a face on this for many people across this
24 country, and we appreciate the time and energy that

1 you've come.

2 And I would say -- I will speak for Senator
3 Manchin and for Congressman Jenkins who I very rarely
4 speak for the two of them -- but I would say we feel
5 very comfortable here and are very glad to be here with
6 you.

7 Senator Manchin.

8 SENATOR MANCHIN: First of all, thank you,
9 Madam Chairman. I want to thank all of you for coming,
10 and all of our presenters and all of you in the audience
11 for showing up today because it's extremely important
12 for all of us. I would like to also thank
13 Chairman Inhofe, Republican Chairman of the EPW and also
14 Ranking Member Barbara Boxer for having this and
15 allowing our Chairwoman here, Capito, for inviting us to
16 speak and also holding this.

17 Let me set the record straight for where I
18 believe that this administration has not understood the
19 grasp of the -- what we call global, a global climate.
20 A global climate means the entire globe. It doesn't
21 mean that the wind and the ocean current start and stop
22 in North America. And when you talk about the globe, it
23 should be a global -- basically a fix. What we have
24 right now -- there's 8 billion tons of coal being burned

1 in the world -- 8 billion tons. United States of
2 America burns about 900 million. We're less than 1
3 billion. If they quit burning every lump of coal in
4 America -- every lump of coal in America, it's not going
5 to change more than two-tenths of 1 percent. These are
6 by scientists and people who's evaluated it.

7 Knowing that this product's going to be
8 needed to energize our country for the next two to three
9 decades -- everyone has said that -- that's the hardest
10 thing that we have to grasp with. If you really want to
11 tackle global climate -- I was at the Global Climate
12 Conference in Poland with our NATO countries. Not one
13 of them -- not one country's administering any of the
14 environmental protection things that we do now. They're
15 not using their scrubbers, they're not using low-NOx
16 boilers or they're not using baghouses. We've perfected
17 all that.

18 And this is what really is baffling to us.
19 Why are we hindering the United States' economy and
20 basically just dismantling economies and communities --
21 not just West Virginia but other coal communities --
22 Kentucky, Southwest Virginia, Eastern Ohio. So with
23 that, it's no secret that we in West Virginia are facing
24 severe economic challenges.

1 The coal economy of our state has been
2 devastated. Cheap natural gas prices compounded by
3 regulatory onslaught by the EPA, an agency that
4 overstepped its authority time and time again, have put
5 coal production in a downward spiral. Being a former
6 governor, I've always said this: You can't regulate
7 what's not been legislated. That's not the role of an
8 agency. That's not the role of any one branch of
9 government. And that's why it has to go through that
10 process because a representative -- myself, Shelley,
11 Evan, all of us who represent basically should have
12 input and we had none.

13 We continue to experience persistently high
14 unemployment rates in this county and the surrounding
15 area traditionally. Our largest coal producing regions
16 we are consistently posting unemployment numbers in the
17 double digits. Some of our southern counties are
18 posting unemployment rates more than double the national
19 average.

20 I have said this and I've said it all over
21 Washington, everybody I can speak to, we've got a
22 minimum of six counties not in a recession but in a
23 depression. The difference between a recession and a
24 depression: In a recession you're waiting for a

1 rebound. It'll come back. We've been through the highs
2 and lows before. A depression, we've given up. We're
3 walking out. Our assets -- there are no assets. We
4 could care less. Here bank. There's my keys to my
5 house. Take it. It's not worth anything to me. That's
6 a depression. That's what we're in.

7 For more -- for the month of August,
8 Workforce West Virginia reported that here in Logan
9 County the unemployment remains at about 10 percent;
10 Mingo County 11.7; Clay County 9.1; Wyoming County 9.4;
11 Boone County 8.4; and McDowell County 12.9. Those are
12 artificially low because other people have quit
13 looking -- they've left or they quit looking. There's
14 no work.

15 Since 2008, West Virginia has lost 13,000
16 coal jobs. The Mine Safety Health Administration
17 reports that in 2008 there were 2,129 coal mines and
18 prep plants. In 2015 that number was only 1,459 coal
19 mines and prep plants. That's a loss of 670. Countless
20 companies have declared bankruptcy. And Workforce West
21 Virginia reports that between July 2015 and July 2016 --
22 in one year -- we lost 4,800 mining and logging jobs,
23 700 manufacturing jobs and 1,700 in trade,
24 transportation and utility jobs.

1 The ripple effect of the near total loss of
2 our state's biggest energy industry is affecting the
3 daily quality of West Virginia lives -- whether it be
4 fewer and fewer grocery stores, childcare options or
5 healthcare services or just closing schools because of
6 lack of students.

7 To complicate matters, we just experienced a
8 once-in-a-century flood that took West Virginia lives,
9 homes and businesses, and that's an absolutely tragic
10 event from which we will be recovering for years to
11 come. So when I look at the manner in which the Obama
12 administration and the EPA have handed down regulation
13 after regulation entirely outside the bounds of what
14 Congress intended when it passed legislation like the
15 Clean Air Act and the Clean Water Act, I can't help but
16 believe that they did not have a plan. I mean, no plan
17 for our state or any other state to be affected the way
18 we have.

19 And that is not only infuriating me and
20 everybody else, it's a tragic, tragic occurrence.
21 Historically, West Virginia has been an energy export.
22 I think you all know that. Our home state sits in the
23 abundant reserves of coal and natural gas.

24 In 2016 Annual Energy Outlook, the Energy

1 Information Administration -- the EIA which is part of
2 the Department of Energy -- projected that in a clean
3 power plant scenario -- this is their scenario -- coal
4 consumption by the electricity sector -- this is the
5 worst scenario you can absolutely paint. If they
6 adopted everything that's in the Clean Power Plan, even
7 with their plan they say about 18 percent of our
8 generation for base load fuel, base load electricity,
9 base load energy will still be coal. Even in the worst
10 case scenario.

11 While cheap natural gas has been a major
12 factor in the downturn of coal production, it is
13 important to remember that we have ridden the markets up
14 and down before. We've always ridden the markets.
15 We've just never had the Federal Government jump on our
16 back and try to drown us during these difficult times.
17 And it's also clear to me that there was no and is no
18 consideration by this administration of how West
19 Virginia will secure a role in the nation's clean energy
20 future.

21 I said you know what, if you've got a plan,
22 use your tax plan. We give what we call tax credits.
23 Okay. We call them extenders. We fluffed them up a
24 little bit in Washington so you won't think we're just

1 giving things away, but they truly are. They're called
2 extenders or tax credits. If I'm going to give a wind
3 company as a policy of the United States of America or a
4 solar energy company credits for developing wind and
5 solar, don't you think they ought to use those credits
6 in the areas that have been displaced?

7 You want us to build you a wind factory. We
8 can build you a windmill. We can build you a solar
9 factory. Just keep our people working. There was no
10 plan. None at all.

11 The EPA's new source performance standard
12 for power plants and the Clean Power Plan for existing
13 power plants are both examples of the EPA legislating
14 instead of regulating. I have introduced, co-sponsored
15 and supported legislation that would roll back climate
16 regulations and other harmful EPA roles.

17 I've co-sponsored, along with my colleague
18 here Senator Capito, Affordable Reliable Energy Act
19 called the ARENA Act reining in harmful effects of the
20 Clean Power Plan. I introduced Clean Air, Strong
21 Economies Act which stems the economic harm of the new
22 ozone standards. I also supported the Ozone Standards
23 Implementation Act. I sponsored the Coal Ash
24 Legislation which we just passed in the Senate, and I

1 introduced legislation that would require EPA to base
2 its regulatory standards on technology that is actually
3 proven and commercially available for use.

4 I'm almost done. I get on a roll here
5 sometimes. I go a little bit longer than I'm supposed
6 to.

7 The first bill that I introduced as a United
8 States senator was legislation that would prevent the
9 EPA from retroactively -- retroactively vetoing a mine
10 permit. These are mine permits that have gone through
11 five, six, seven, eight, nine, ten years. They went
12 back and reached back arbitrarily and said okay, no
13 more. And that's not right. We fought that.

14 An unprecedented legal action in 2010, I
15 sued the EPA as governor at that time for overstepping
16 its bounds regarding mountaintop removal practice in
17 West Virginia's coal industry to ensure states that have
18 the power to oversee, regulate and protect their
19 citizens and resources. That's basically protecting the
20 10th Amendment to the Constitution. State's rights.
21 Our founding fathers never intended for the overreach
22 and basically the micromanagement of government to come
23 from Washington.

24 We have responsibilities and rights. And

1 earlier this year I joined 33 of my colleagues in the
2 Senate and 171 members of the House in filing a brief
3 with the D.C. Circuit Court of Appeals challenging the
4 legality of the Clean Power Plan. Oral arguments were
5 just heard last week in West Virginia versus the EPA.
6 We were both there. We had good representation.

7 And right now when I talk to people that
8 basically -- I think, Gene, we talked coming in -- it's
9 a 50/50. It could be tossed up and go either way. I
10 think we're going to end up in the Supreme Court. I
11 really do. And we have got to fight. We have got to
12 fight it hard.

13 Furthermore, I do not believe the EPA
14 consulted with the Federal Energy Regulatory Commission
15 which is FERC. With energy, base-loaded energy in the
16 United States of America should be dependable, reliable
17 and affordable. They never basically talked to FERC to
18 find out will the system be reliable if you take this
19 much coal-fired energy off the grid. How are you going
20 to back it up?

21 The vortex, the polar vortex almost shut
22 down the East Coast. There would've been people dying,
23 arbitrarily dying across the East Coast because of that
24 polar storm. They did not take that in consideration

1 whatsoever.

2 So fossil fuels are going to continue to be
3 a major part of both domestic and global energy. As we
4 speak -- I believe I'm correct in this number -- over
5 500 new coal-fired plants are being built in India.
6 Close to 400 are still being built in China. The
7 product is the most abundant fuel in the world, and for
8 us to deny other countries from developing -- first time
9 energy users -- this is the first time in some of these
10 countries, especially in rural India, they've ever had a
11 refrigerator, they've ever had a light bulb in their
12 home, they've ever had anything.

13 And we're going to say oh, I'm sorry, you
14 can't do that. That's not going to happen. So we
15 better get with it and development the technology that
16 we can use coal in a cleaner fashion.

17 So I believe that we must further develop
18 and commercialize carbon capture, utilization and
19 sequestration, but you just can't make it so expensive
20 that basically it runs every coal plant out of
21 existence. And right now we don't have technology that
22 can use it in an affordable way. We must put the
23 necessary infrastructure in place to take advantage of
24 the robust opportunities that come from our abundant

1 natural resources while ensuring the reliability.

2 Instead of looking to technology and
3 infrastructure to clean up those fossil fuels and secure
4 the future of energy-producing states like West
5 Virginia, the EPA under this administration has taken it
6 upon itself to legislate a climate agenda that Congress
7 never authorized. We haven't had one input. We're just
8 playing defense all the way through.

9 West Virginia has helped power the nation
10 for decades. We have done the heavy lifting and I -- to
11 the high heavens, I shout out basically what this little
12 state has done and I want you all to know that basically
13 we have as the State of West Virginia, we have done the
14 heavy lifting. We've mined the coal that made the steel
15 that built the guns and ships. We have more patriots.
16 We have more veterans per capita than any other state.
17 We have shed more blood. Lost more lives for the cause
18 of freedom.

19 This little state has given her all. And
20 now we feel -- and I've told them this -- my state
21 across the board -- forget politics -- Democrat,
22 Republican -- across the board we feel like the
23 returning Vietnam veteran. We've done everything you've
24 asked us to do. We put our life on the line, and now

1 you've turned your back on us. And now you want people
2 to believe that we didn't do our job or what we did you
3 didn't like.

4 We built the greatest nation on Earth and we
5 have. The only super power in the world is the United
6 States of America because of domestic energy, mostly
7 coal. Someone's got to recognize that, and someone's
8 got to have a pathway for it that is humane and it will
9 work.

10 So I would say I'm happy to work -- and
11 Shelley and I have been working hard on the Miners'
12 Protection Act. It's imperative. If we don't pass that
13 before the end of the year, 16,000 miners -- retired
14 miners, will lose their healthcare by the end of this
15 year. 7,000 more by July of next year. After that, by
16 the end of next year, the pensions that all of our
17 retired miners -- United Mine Workers are receiving
18 right now will start spiralling down. They're
19 irrecoverable.

20 And that bill has passed. They've asked us,
21 both Shelley and I, they said go through regular order.
22 We did that. The finance committee passed it 18 to 8 --
23 18 to 8. It was bipartisan. All we need is for Mitch
24 McConnell to put it on the agenda, and it will pass.

1 That's all we need. So anybody that knows Mitch, close
2 to him, can call him, talk to him, please do so. We
3 need it on the agenda. We've got to pass it before
4 December the 9th.

5 Thank you, Madam Chairman. I can't thank
6 you enough for this hearing.

7 SENATOR CAPITO: Thank you, Senator Manchin.
8 I feel a bit like the person who did the
9 vice-presidential debate last night. I feel like I've
10 already lost control of my own hearing. In any event,
11 Congressman Jenkins, thank you.

12 CONGRESSMAN JENKINS: Thank you, Senator.
13 There were no interruptions along the way, so --

14 SENATOR CAPITO: That's true.

15 SENATOR MANCHIN: Very nice.

16 CONGRESSMAN JENKINS: We're old friends.

17 Senator Capito, thank you so much for the
18 wonderful opportunity. You know, the folks in this room
19 see us altogether -- Democrats, Republicans, House,
20 Senate -- working hard for West Virginia. What you may
21 not realize is the opportunity for me to participate in
22 a Senate hearing is probably bending the rules a little
23 bit that Senator Capito went to the mat in her
24 leadership role in the subcommittee calling this and I

1 am sincerely appreciative of the opportunity of being
2 able to participate directly. I don't get to go down
3 the hall on the Senate side and sit in on the Senate
4 hearing, so we appreciate it very much. Senator
5 Manchin, great to be with you.

6 This is a unique opportunity. It was
7 referenced about communicating with the EPA and their
8 unwillingness to come to West Virginia, and it reminds
9 me when I had Gina McCarthy -- not even as far as
10 Commissioner Pasley and I are apart here -- a few feet.
11 I asked Gina McCarthy, I said, "Ms. McCarthy, have you
12 ever been to West Virginia as the EPA Secretary?" You
13 know, the lawyers and a lot of people say you never ask
14 a question you don't already know the answer. And she
15 said, "Well, I can't recall." And I said, "Well, I know
16 you've not been to West Virginia, and I know you know
17 you haven't been to West Virginia. You just can't even
18 bring yourself to acknowledge that no, I've been
19 unwilling to even come to West Virginia."

20 So having this subcommittee hearing under
21 Senator Capito's leadership is quite an opportunity for
22 our voices to be heard, and I appreciate the opportunity
23 for these voices. These are important voices. You
24 know, times are tough here in Logan County and

1 throughout Southern West Virginia. And it's really in
2 large part and it is because of the war on coal. And
3 there is a war on coal, and we feel it. We see it. We
4 actually can taste it right here in Southern West
5 Virginia.

6 You know, coal jobs are good jobs. As
7 Senator Capito very accurately said, Bureau of Labor
8 Statistics -- average coal job \$84,000 a year. You can
9 support a family on that. You can raise a family. You
10 can provide for a family. You can put food on the table
11 for that.

12 Whereas, the average wage in West Virginia
13 is \$39,000. So over twice the average is a coal miner's
14 wage. And we talked about the unemployment rate. Eight
15 years ago West Virginia had one of the lowest
16 unemployment rates in the entire county. Today, we
17 tragically are one of the highest. So what's happened
18 in the last eight years? We all see it. I hear time
19 and time again from moms, dads, retirees who are worried
20 about their futures and worried about their children's
21 futures. They're forced to make some very tough
22 decisions.

23 One of those is with us today, Bo Copley.
24 Bo joined me at an event here not long ago where I was

1 highlighting our efforts to extend unemployment
2 compensation benefits for our laid off, employed coal
3 miners. We were bringing a national spotlight to this
4 tragedy. I also brought two coal miners --
5 Jordan Bridges is with us, Doug Killan. We brought them
6 to Washington. We put them in front of a congressional
7 committee to tell the story of the plight of the West
8 Virginia coal miners.

9 But there's another story. I heard from
10 Tammy Bateman of Logan County. She's lived here all her
11 life, but she and her husband -- and her husband worked
12 for CI Walker Machinery in their Logan branch for almost
13 20 years and they had to move. And here's what she
14 wrote me. "Due to the decline in coal industry, we had
15 to move to another state and move our daughter from the
16 school she loves. We have a lot of friends and family
17 that have either had to pack up and move away also and
18 some that have stayed and have had to be laid off and
19 are suffering. This is all due to Obama's war on coal.
20 You see, when coal is affected, so are small businesses,
21 schools and much more -- especially people's
22 livelihoods."

23 Just as Tammy wrote to me and said that, the
24 war on coal impacts so many people and businesses, so

1 many more than just the thousands of direct coal mining
2 jobs as we've heard today. It hurts our schools. It
3 hurts our police and fire departments all of which are
4 funded by the coal severance tax. We've got Bob Pasley
5 here from Wayne County who's going to talk about the
6 fact that coal severance tax revenue has dropped 88
7 percent from 2013 to 2016. And as coal mines shut down,
8 communities have less and less and have had to make
9 tough choices.

10 So Senator Capito, thank you for this
11 opportunity. I look forward to the testimony of the
12 panelists. I appreciate the fact that we are in
13 Southern West Virginia, in the 3rd Congressional
14 District, in front of coal miners who are going to have
15 their voices heard, and they've not had that opportunity
16 enough in the past. So it's an honor to be here, and
17 thank you for this opportunity.

18 SENATOR CAPITO: Thank you both for our
19 opening statements, and now we will begin with the
20 witnesses. We're going to begin on the left with
21 Mr. Gene Trisko. Gene is the counsel to the United Mine
22 Workers of America, and he's from Berkley Springs, West
23 Virginia. And he is no stranger to helping us analyze
24 the effects of legislation for many years.

1 Welcome, Gene.

2 MR. TRISKO: Thank you, Chair Capito,
3 Senator Manchin, Congressman Jenkins. It's a great
4 pleasure for me to be here. I've represented the United
5 Mine Workers for some 30 years in environmental matters,
6 and I must say, ladies and gentlemen, I've never seen it
7 like this before.

8 I'm here today to talk about the impacts of
9 EPA's Clean Power Plan and also to express our
10 appreciation to you Chair Capito, Senator Manchin and
11 Congressman Jenkins for your leadership and your support
12 of the Miner's Protection Act. We must get that
13 accomplished this year, as you have clearly stated, and
14 we're all committed to working together later this year
15 with Senator McConnell in order to ensure that result.

16 The mine workers, along with West Virginia
17 and other petitioners -- and there are more than a
18 hundred petitioners -- have challenged the validity of
19 the EPA Clean Power Plan in Federal Court. In May the
20 Supreme Court issued an unprecedented stay of the rule
21 pending the conclusion of all legal challenges. We
22 believe that the Power Plan oversteps EPA's legal
23 authority under Section 111(d) of the Clean Air Act
24 because it forces utilities to switch from coal to

1 natural gas or renewable energy in a manner inconsistent
2 with the legal requirements of the Clean Air Act.

3 West Virginia depends on coal for 96 percent
4 of its electricity. West Virginia's economy, coal
5 miners, communities, electric generators and the allied
6 industries that depend on coal for their livelihoods and
7 all of these industries share the high wage structure,
8 Senator Capito, that you noted -- all of these
9 industries share that characteristic. They will all
10 suffer greatly if this rule is implemented.

11 Recent studies by the PJM Interconnection --
12 and this is the multistate power grid that covers West
13 Virginia and eight or nine other states -- indicate that
14 EPA's rule could cause West Virginia to lose up to 34
15 percent of its coal-based electric generation by 2025 if
16 the state met its EPA targets by instate means.

17 There could be smaller loses if West
18 Virginia engaged in an interstate trading program, but
19 in effect what that would mean is that West Virginia
20 rate payers would be asked to subsidize the construction
21 of renewable energy facilities in other states. So
22 hundreds of millions of dollars would leave the pockets
23 of West Virginia rate payers in order to create those
24 renewable facilities mainly in other states -- Iowa for

1 wind, New Mexico for solar and so forth.

2 These impacts do not consider the loses of
3 coal production that would result from the loss of coal
4 shipments to other states that are affected by the EPA
5 rule. This is a very important point. Less than
6 one-third of West Virginia's coal production is consumed
7 in state. That's what makes it impossible for West
8 Virginia to control its destiny, so to speak, in the
9 implementation of the Clean Power Plan.

10 Between 2009 and 2014, West Virginia lost 32
11 million tons of coal output, and all of the high wage
12 jobs associated with that. Those losses are
13 attributable to lower natural gas prices and to the EPA
14 mercury MATS rule.

15 The Department of Energy estimates that the
16 mercury rule has caused the closure of some 40,000
17 megawatts of coal capacity across the nation. EPA at
18 the time of issuing that rule estimated the loss of coal
19 capacity at 4,700 megawatts. The WVU Bureau of Business
20 and Economic Research has estimated that the EPA power
21 plan would lead to the loss of about 20 million tons of
22 West Virginia coal production. This is on top of the
23 losses that already have occurred.

24 Using data from DOE's analysis of the Carbon

1 Rule and an extended Clean Power Plan, we estimate that
2 another 20 million tons of production would be lost if
3 the national CO2 reduction were expanded from 32 percent
4 in the current rule to 45 percent by 2040.

5 DOE's extended power plan scenario is
6 consistent with the pledges that the United States of
7 America made in the December 2015 Paris agreement. This
8 would reduce total West Virginia coal production from a
9 current level of about a hundred million tons today to
10 60 million tons by 2040. The consequences of these
11 production losses would be devastating for jobs, for the
12 overall state economy.

13 Applying U. S. Department of Commerce
14 economic multipliers specific to the West Virginia
15 mining sector, we estimate that the EPA Carbon Rule --
16 and this is just a rule that's on the books today --
17 would lead to the cumulative loss of \$47 billion of
18 state economic output, 11 billion of household income
19 and 229,000 job years of employment by 2040. A job year
20 is one job held for one year.

21 Even larger losses would occur if an
22 extended power plan were adopted along the lines of the
23 Paris agreement. West Virginia's state output could be
24 reduced by a cumulative \$60 billion by 2040 along with

1 \$14 billion loss of household income. A total of
2 288,000 job years of employment would be lost. Clearly,
3 West Virginia cannot afford such draconian economic
4 impacts.

5 The U. S. Census Bureau reports that the
6 pretax median household income in West Virginia in 2015
7 was \$42,800, and that is 24 percent below the national
8 median income and \$5,300 below West Virginia's 2007
9 pre-recession levels.

10 You know, there was a lot of talk in the
11 last few weeks about the big increase in median incomes.
12 Well, there was a bump in 2015. The first time really
13 since 2009. But as it stands, West Virginia's median
14 household income, you're \$5,300 below where you were in
15 2007. So not so much of an impact in West Virginia.

16 The UMWA supports reasonable measures to
17 address climate change consistent with established Clean
18 Air Act principles, but we cannot support rules that
19 cause massive loss of jobs and income in already
20 depressed rural communities like Southern West Virginia.
21 We need instead a major infusion of R&D capital -- both
22 federal and private -- to lower the cost of carbon
23 capture technologies so that coal can continue to play a
24 vital role in base load power generation.

1 We look forward to working with the
2 Congress, the Department of Energy and other interested
3 parties to ensure this future for our members and for
4 our nation. Thank you very much.

5 SENATOR CAPITO: Thank you very much,
6 Mr. Trisko. Our next person is our commissioner, our
7 Wayne County commissioner, Bob Pasley. Before he was
8 commissioner, he was for many years the county clerk in
9 Wayne County. So thank you Commissioner for coming. We
10 look forward to your comments.

11 MR. PASLEY: Senator Capito, let me tell you
12 I appreciate this opportunity to come before and the
13 invitation was very pleasing. It's always good to be
14 with Senator Manchin, Congressman Jenkins. Thank you
15 all for this opportunity.

16 I have a -- you know, folks who might be
17 listening to this see the world from 35,000 feet, but as
18 county commissioner, I have the honor and the privilege
19 of serving on the ground and I -- where the services are
20 rendered so many times to our people. So this is coming
21 from a dollars-and-cents standpoint but also from here
22 (indicating).

23 Wayne County is located in the southwest
24 corner of West Virginia. According to the 2010 census,

Statement of Eugene M. Trisko
On behalf of
United Mine Workers of America, AFL-CIO

Before the
U.S. Senate Environment and Public Works Committee
Subcommittee on Clean Air and Nuclear Safety
Chief Logan State Park, WV
October 5, 2016

Good afternoon, Chair Capito and distinguished members of the Subcommittee.

I am Eugene M. Trisko, an attorney in private practice. I am here on behalf of the United Mine Workers of America (UMWA), whom I have represented in environmental matters for some 30 years. Several exhibits are attached to my statement, which I will summarize briefly.

The UMWA appreciates this opportunity to testify on the impacts of EPA's Clean Power Plan. We also want to express our great appreciation to Chair Capito for her continuing strong leadership in securing passage of the Miners Protection Act.

The UMWA, along with West Virginia and other petitioners, have challenged the validity of the EPA carbon rule in Federal court. Last February, the Supreme Court issued an unprecedented stay of the rule pending the conclusion of all legal challenges.

We believe that the Power Plan oversteps EPA's authority under section 111(d) of the Clean Air Act because it forces utilities to switch from coal to natural gas or renewable energy in a manner

inconsistent with the legal requirements of the Clean Air Act. West Virginia depends on coal for 96% of its electricity.

West Virginia's economy, and the coal miners, communities, electric generators and allied industries that depend on coal for their livelihoods will all suffer greatly if this rule is implemented.

Recent studies by the PJM Interconnection, a multistate power grid, indicate that EPA's rule could cause West Virginia to lose up to 34% of its coal-based electric generation by 2025 if the state met its EPA targets by in-state means. Smaller losses would result if West Virginia participated in an interstate trading program, in effect asking West Virginia ratepayers to subsidize new renewable facilities in other states. These impacts do not consider the losses of coal production due to reduced coal shipments to other states covered by EPA's rule. Less than one-third of West Virginia's coal production is consumed in-state.

Between 2009 and 2014, West Virginia lost 32 million tons of coal output and the high-wage jobs created by coal mining. These losses are attributable largely to lower natural gas prices and the EPA mercury MATS rule. DOE estimates that the mercury rule has caused the closure of some 40,000 Megawatts of coal capacity across the nation. EPA's estimate of these closures was 4,700 Megawatts.

The WVU Bureau of Business and Economic Research estimates that the EPA Power Plan would lead to the loss of some 20 million tons of West Virginia coal production. Using data from DOE's analysis of the carbon rule and an "Extended Clean Power Plan," we estimate that another 20 million tons of production would be

lost if the national CO2 reduction requirement were expanded from 32% in 2030 to 45% by 2040. DOE's Extended Power Plan scenario is consistent with the pledges that the U.S. made in the December 2015 Paris Agreement. This would reduce total West Virginia coal production from about 100 million tons today to 60 million tons by 2040.

The consequences of these coal production losses would be devastating for jobs and the overall state economy. Applying U.S. Department of Commerce economic multipliers for the West Virginia mining sector, we estimate that the EPA carbon rule would lead to the cumulative loss of \$47 billion of state economic output, \$11 billion of household income, and 229,000 job-years of employment by 2040.

Even larger losses would occur if an Extended Power Plan were adopted. West Virginia state output could be reduced by a cumulative \$60 billion by 2040, along with a \$14 billion loss of household income. A total of 288,000 job-years of employment would be lost.

Clearly West Virginia cannot afford such draconian economic impacts. The U.S. Census Bureau reports that pre-tax median household income in West Virginia in 2015 was \$42,824, 24% below the national median income and \$5,292 below 2007 pre-recession levels.

The UMWA supports reasonable measures to address global climate change, consistent with established Clean Air Act principles, but we cannot support rules that seek to solve this

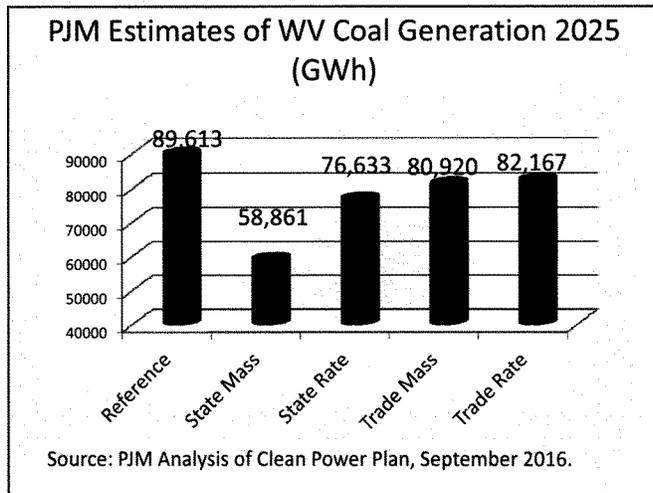
global challenge on the backs of Appalachian families, causing further disruption to already depressed rural communities.

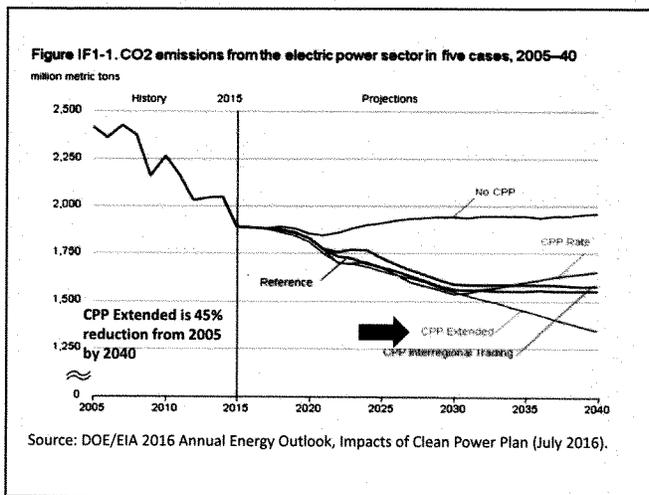
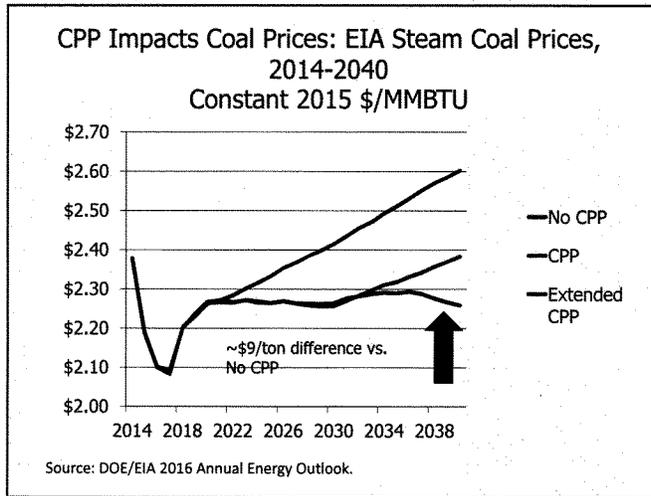
We need instead a major infusion of R&D capital, both Federal and private, to lower the cost of carbon capture technologies so that coal can continue to play a vital role in baseload power generation. We look forward to working with the Congress, the Department of Energy, and other responsible parties to ensure this future for our members, and for our nation.

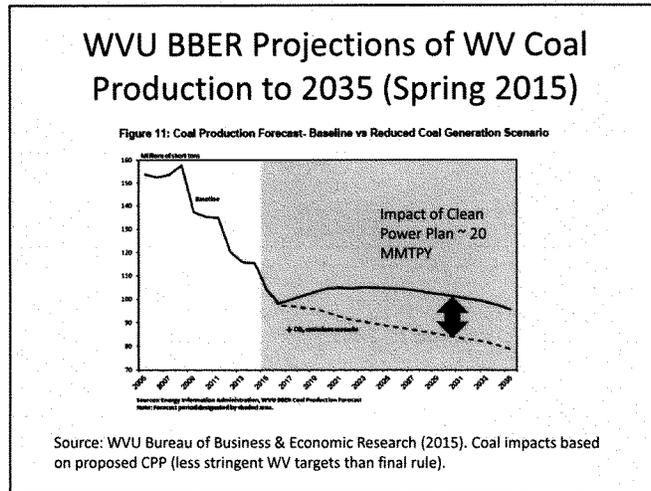
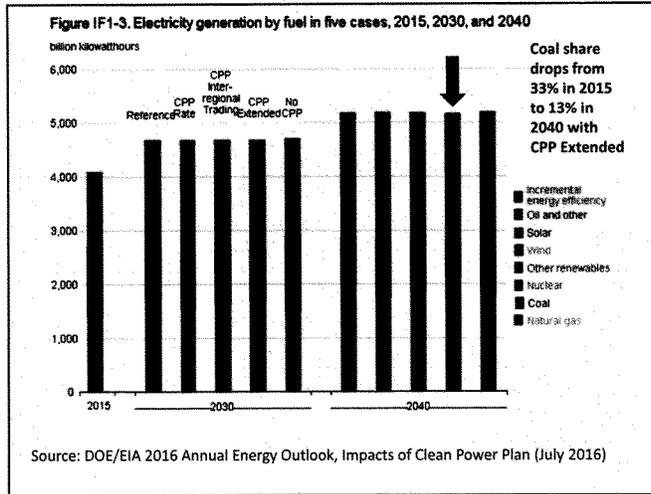
Thank you for the opportunity to appear today.

Exhibits to Statement of
Eugene M. Trisko
On Behalf of
United Mine Workers of America

Before the
U.S. Senate Committee on Environment and
Public Works
Subcommittee on Clean Air and Nuclear
Safety
Chief Logan State Park, WV
October 5, 2016



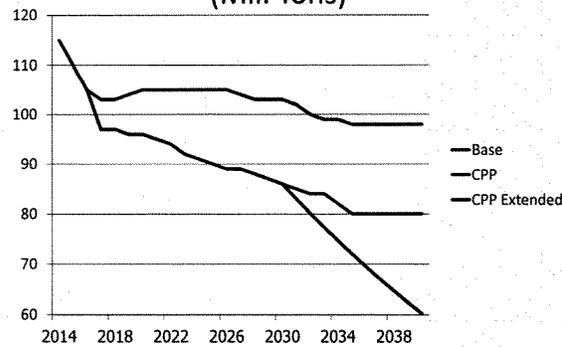


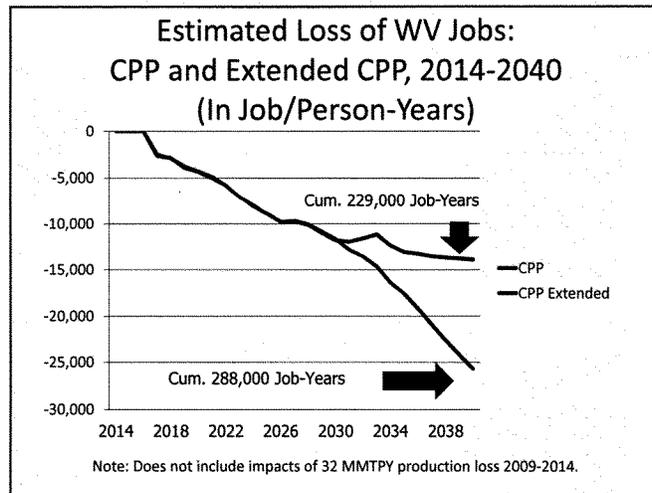
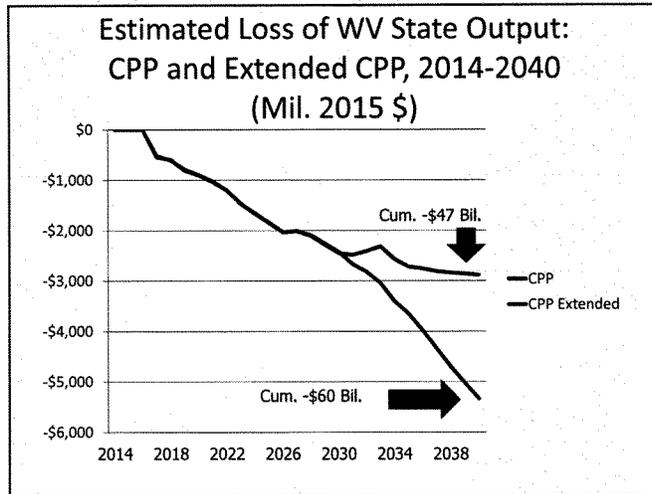


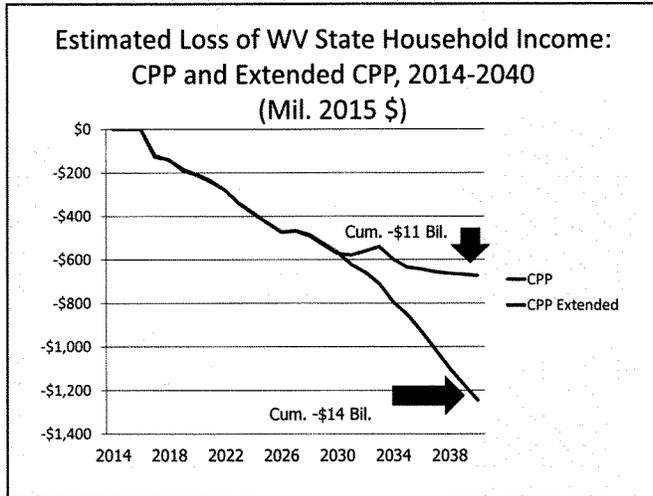
Estimating Impacts to 2040

- Use WVU BBER estimates of CPP production losses, extended to 2040 and adjusted for CPP Extended additional CO2 reductions 2025-40.
- Apply DOE/EIA steam coal prices to estimate industry revenue impacts for CPP and CPP Extended cases.
- Use U.S. Dept. of Commerce economic and job multipliers for the WV coal industry to estimate impacts on WV state output and household income.
- These estimates do not include impacts of MATS rule and other factors causing loss of 32 MMTPY of WV coal production from 2009 to 2014.

Estimated WV Coal Production: Base Case, CPP and Extended CPP, 2014-2040 (Mil. Tons)







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Curriculum Vitae

Eugene M. Trisko is an energy economist and attorney who represents labor clients in energy and environmental matters.

Mr. Trisko has a dual B.A. in economics and politics from New York University (1972) and a J.D. degree from Georgetown University Law Center (1977). Before entering private practice in 1991, he was an energy economist with Robert Nathan Associates in Washington, DC, (1973-77), an attorney with the U.S. Federal Trade Commission (1977-79), and executive vice president of Stern Bros., Inc., an energy holding company in West Virginia (1986-91).

He was involved from 1981 until 1990 in the legislative development of the Clean Air Act Amendments of 1990, focusing on the Title IV acid rain program. He is the author of more than 30 articles on energy and environmental policy issues published in economic, energy, environmental, and law journals, and has testified before Congress and state legislatures on numerous occasions.

Mr. Trisko has participated as an NGO on behalf of the United Mine Workers of America in all United Nations climate change negotiating sessions subsequent to the 1992 Rio Earth Summit. In 2007, he helped to negotiate the clean coal technology and emission allowance allocation provisions of the bipartisan Bingaman-Specter climate bill. *The Hill* has recognized Mr. Trisko as one of Washington's "Top Grassroots Lobbyists." In 2008 and 2009, he helped to negotiate the carbon capture and storage provisions of the Boucher-Rahall and Waxman-Markey climate bills.

Mr. Trisko served for nine years as an appointed member of U.S. EPA's Clean Air Act Advisory Committee. In 2000 and 2007, he was named by the U.S. Department of State as a non-government member of the U.S. Delegation in U.S.-Canada air quality negotiations. He is a Fellow of the American College of Environmental Lawyers. He currently represents labor petitioners in litigation before the D.C. Circuit Court of Appeals concerning EPA's Clean Power Plan and NSPS carbon rules.

1 we had 42,481 citizens, and I think that's been reduced
2 now because we've had losses. But of those, 65 percent
3 were rural, and 35 percent were urban. So we have a
4 unique county in that we have a city part and we have a
5 country part.

6 Two companies that I want to bring to -- or
7 three actually -- to mention today. Argus Energy and
8 Kiah Creek Transport closed in 2013 resulting in the
9 loss of 236 jobs directly related to the coal mining
10 industry. In 2015, Alpha Natural Resources closed its
11 Rock Spring Mine operation resulting in the loss of 429
12 jobs at their mine and preparation plant.

13 Now, for these communities this is what was
14 involved: Argus Energy was a business partner with
15 Dunlow Elementary School. According to Ms. Kim Mills,
16 principal of Dunlow Elementary, the loss of their
17 business partner has been devastating. As a business
18 partner, Argus Energy provided playground equipment,
19 beautification and equipment repairs.

20 Additionally, Argus provided the labor and
21 materials for painting the entire school building. And
22 for -- and they provided a copier every three years for
23 that school, and they did many other things around that
24 school that they no longer have available to them.

1 Rock Spring Development, likewise, was a
2 business partner with East Lynn Elementary School. I
3 contacted Ms. Melissa Maynard, principal of East Lynn
4 Elementary School, and she also said that the loss of
5 the school's business partner was a severe blow to the
6 school and the students. Rock Spring owners and
7 employees provided many benefits to the school.
8 Playground equipment, a new sign, classroom improvements
9 were some the projects undertaken.

10 Additionally, Ms. Maynard said that Rock
11 Spring adopted the preschool students and provided
12 additional items for them, including a Christmas party
13 for all the preschool students and their families along
14 with presents for each child. Ms. Maynard stated that
15 the Rock Spring family was always willing to help any
16 time she called upon them.

17 Now, Wayne County's coal severance revenues
18 have all but disappeared. That was mentioned awhile
19 ago. I think the Congressman mentioned it. From fiscal
20 year 2013, was \$728,500 and for fiscal year 2016,
21 \$86,523. Based on what we know now, this was a -- this
22 was when we budgeted in March. We were probably
23 optimistic even at the \$86,000 mark. I have that as
24 Exhibit 1 in my presentation.

1 And you'll see down there at the fiscal year
2 2016, the first quarter, second quarter, the third
3 quarter and fourth quarter -- the third and fourth
4 quarter had zero money from the 75 percent allocation.
5 Now, when you have two operating mines in the county and
6 they're gone and you have zero income, you just can't
7 take much more than that away from us. And that's one
8 of the things that we have known.

9 Now, what do we use coal severance money
10 for? Well, thankfully we didn't operate it for
11 unimportant things. The money was used for goods and
12 services that we do not have -- did not have in our
13 county, general county budget. We used to -- we did
14 give \$50,000 each year to the volunteer fire department
15 for an ambulance for our people. We have a program
16 where we had two police cruisers replaced every year for
17 our sheriff department. This will be the third year
18 that we haven't been able to do that. We're going to be
19 in critical need before long.

20 Capital building projects, senior citizen
21 programs, utilities, economic development and many other
22 worthwhile projects were part of this coal severance
23 that we no longer have. And then now that we don't have
24 the funding, we have to look at a already tight general

1 county budget to plan those in and it's not there. And
2 I'll go on and tell you exactly why.

3 The general county fund loss is more
4 critical because more money is involved. During this
5 time the Wayne County Commission -- we saw our insurance
6 premiums continue to rise -- utilities, property and
7 liability insurance. And I forgot to mention here our
8 regional jail bill. And so those things that we have to
9 provide as county services, a very tight budget is now
10 even strained further.

11 Based on figures compiled by the Assessor's
12 Office -- Wayne County Assessor's Office, coal tax
13 revenue by Argus and Rock Spring Development and three
14 other coal-related industries declined from 1,702,000 to
15 1,340,000 from 2013 to 2016 -- a total decrease of 21
16 percent.

17 Personal property for this period saw a
18 total decrease of 22 percent, while the real estate
19 taxes for this period decreased by 5 percent. That
20 doesn't even get into the leased properties that they
21 leased for coal that when they're no longer mineable,
22 that value disappears too. With that value
23 disappearing, so does our revenues.

24 Even more a telling statistic is the

1 increase in tax delinquencies -- and, Senator Capito, I
2 think you touched on this -- by these industries for the
3 period. In 2015/2016 Rock Springs Development had a
4 total tax delinquency of \$2,426,000, while Argus and
5 Lincoln Leasing have tax delinquencies of 380,000 and
6 \$137,000 respectfully.

7 This resulted in the net loss of \$3 million
8 in coal tax revenues to Wayne County. The loss
9 constitutes a \$2,371,000 loss in tax revenues to Wayne
10 County Board of Education who is now struggling because
11 of these losses, and \$810,867 lost in general county
12 revenues -- revenues which are critical for our
13 education system and general county operations. And I
14 have shown on Exhibit 2 here the -- by -- from fiscal
15 year '13 to fiscal year '16 the decline in the values
16 and revenues that we have now to work with.

17 And as mentioned before too, I've worked at
18 the Wayne County Courthouse for 39 years. 31 of which
19 has been served either elected official as county clerk
20 or county commissioner. And during that time -- and I
21 was the bookkeeper and I know -- I do not believe that
22 Wayne County has been so challenged to provide for its
23 citizens that it is now experiencing, and the forecast
24 for the foreseeable future is very bleak.

1 So I hope that this has been some kind of
2 informative thing that you can use and you can take back
3 with you and know that this comes from the ground.

4 Thank you very much.

5 SENATOR CAPITO: Thank you, Commissioner.
6 Our next panelist is Jimmy "Bo" Copley who is a coal
7 miner here in Southern West Virginia. He's also a
8 family man. And he's going to tell his story to all of
9 us. Thank you, Bo, for coming.

10 MR. COPLEY: Senators Capito, Manchin,
11 Congressman Jenkins, thank you for having me here today.
12 As I said, my name is Bo Copley. I'm a 39-year-old
13 child of God, I'm a husband to one, a father to three, a
14 proud West Virginian and unfortunately a former coal
15 miner.

16 I was formally employed at Coalmac,
17 Incorporated in Holden, West Virginia, which is a
18 subsidiary of Arch Coal in St. Louis, Missouri, and I
19 was employed there from July 26, 2004 to September 18,
20 2015. My duties at that job were that of a maintenance
21 planner, EMT, rescue team member and a certified surface
22 mine foreman.

23 Just slightly over a year ago, I was
24 notified that my services were no longer needed due to a



County Commission of Wayne County

P.O. Box 248

Wayne, WV 25570

Phone 304-272-6350 • Fax 304-272-6348

Robert E. Pasley, President • Kenneth R. Adkins, Commissioner • David H. Pennington, Commissioner

Senate Committee on Environment and Public Works

Subcommittee on Clean Air and Nuclear Safety

Chief Logan Conference Center

Logan, West Virginia

October 5, 2016

Wayne County, West Virginia is located in southwest corner of West Virginia. Wayne County has a population of 42,481 per 2010 Census. Of this total, 27,692 residents (65%) are categorized as rural, whereas, 14,789 (35%) are categorized as urban.

Argus Energy and Kiah Creek Transport closed in 2013, resulting in the loss of 236 jobs directly related to the coal mining industry. In 2015, Alpha Natural Resources closed its Rockspring mine operation, resulting in the loss of 429 jobs at their mine and preparation plant.

Argus Energy was a business partner with Dunlow Elementary School. According to Ms. Kim Mills, principal at Dunlow Elementary, the loss of their business partner has been devastating. As a business partner, Argus Energy provided playground equipment, beautification and equipment repairs. Additionally, Argus provided the labor and materials for painting the exterior of the school, provided a copier for the school every three (3) years and many other benefits for the school.

Rockspring Development, Inc. was a business partner with East Lynn Elementary School. I contacted Ms. Melissa Maynard, principal of East Lynn Elementary School, and she also said that the loss of the school's business partner was a severe blow to the school and its students. Rockspring owners and employees provided many benefits to the school. Playground equipment, a new school sign and classroom improvements were some of the projects undertaken. Additionally, Ms. Maynard said that Rockspring "adopted" the pre-school students and provided additional items for them, including a Christmas Party for all the pre-school students and their families, along with presents for each child. Ms. Maynard stated that the Rockspring family was always willing to help anytime she called on them.

Wayne County's Coal Severance revenues have all but disappeared with the loss of mining operations in Wayne County. As the attached exhibit (*Exhibit No. 1*) shows, from FY 2013 to FY 2016, coal severance revenues declined from \$728,500 to \$86,523, an 88% loss of coal severance revenue.

Coal severance revenues were used for goods and services that Wayne County's general fund could not support such as an annual grant of \$50,000 to one of our six (6) volunteer fire departments that provide ambulance services to our citizens, two (2) police cruisers for the sheriff's department, capital building projects, senior citizens programs, utilities, economic development and many other worthwhile projects. With the loss of this funding, the County Commission has to look to a tight general county budget to provide some of these expenditures.

The loss of general county revenues due to the halt of mining activities is also being felt. During this time, the Wayne County Commission saw increases in health insurance costs, utilities, and property liability insurance, as well as other costs associated with the provision of county services, making the loss of coal tax revenues even more critical to our county. Based upon tax figures compiled by the Wayne County Assessor's office, coal tax revenues by Argus Energy (*Exhibit 3*), Rockspring Development, Inc. (*Exhibit 4*), and three coal related industries; Walker Machinery, GE Captial and Lincoln Leasing (*Exhibit 5*), declined from \$1,702,259 to \$1,340,986 from 2013 to 2016, a total decrease of 21%. Personal property for this period saw a total decrease of 22%, while real estate taxes for this period decreased by 5%.

An even more telling statistic is the increase in tax delinquencies by these industries for this period. In 2015 and 2016, Rockspring Development has a total tax delinquency of \$2,426,475, while Argus Energy and Lincoln Leasing have tax delinquencies of \$380,809 and \$137,147, respectively. This resulted in a net loss of \$3,182,431 in coal tax revenues to Wayne County (*Exhibit 2*). This loss constitutes a \$2,371,564 loss in tax revenues to the Wayne County Board of Education and a \$810,867 loss in general county revenues – revenues which are critical for our education system and for general county operations.

I have worked at the Wayne County Courthouse for thirty-nine and a half years, thirty-one of which I have served in the elected offices of the County Clerk and County Commissioner. During that time I do not believe that Wayne County has been so challenged to provide for its citizens as it is now experiencing and the forecast for the foreseeable future is bleak.

Respectfully submitted,

Robert E. Pasley, President
Wayne County Commission
Wayne County, West Virginia

Exhibit 1

Wayne County , West Virginia Coal Severance Revenues FY2013-2016				
FY 2013				
Fiscal Year	Quarter	75% Allocation	25% Allocation	Total Coal Severance
2013	1st	\$152,442.43	\$29,110.17	\$181,552.60
2013	2nd	\$182,121.77	\$42,431.83	\$224,553.60
2013	3rd	\$121,407.28	\$30,861.33	\$152,268.61
2013	4th	\$133,224.72	\$36,899.64	\$170,124.36
	Total	\$589,196.20	\$139,302.97	\$728,499.17
FY 2014				
Fiscal Year	Quarter	75% Allocation	25% Allocation	Total Coal Severance
2014	1st	\$119,790.16	\$30,945.62	\$150,735.78
2014	2nd	\$85,117.91	\$30,037.26	\$115,155.17
2014	3rd	\$66,780.56	\$21,291.45	\$88,072.01
2014	4th	\$72,244.11	\$39,389.43	\$111,633.54
	Total	\$343,932.74	\$121,663.76	\$465,596.50
FY 2015				
Fiscal Year	Quarter	75% Allocation	25% Allocation	Total Coal Severance
2015	1st	\$45,200.86	\$22,308.14	\$67,509.00
2015	2nd	\$61,434.62	\$31,579.87	\$93,014.49
2015	3rd	\$29,872.08	\$21,951.30	\$51,823.38
2015	4th	\$47,133.02	\$30,805.50	\$77,938.52
	Total	\$183,640.58	\$106,644.81	\$290,285.39
FY 2016				
Fiscal Year	Quarter	75% Allocation	25% Allocation	Total Coal Severance
2016	1st	\$11,818.57	\$17,028.07	\$28,846.64
2016	2nd	\$1,125.78	\$23,920.19	\$25,045.97
2016	3rd	\$0.00	\$13,827.22	\$13,827.22
2016	4th	\$0.00	\$18,832.74	\$18,832.74
	Total	\$12,944.35	\$73,608.22	\$86,552.57

Wayne County, West Virginia Coal Tax Revenues 2013-2016			
Argus Energy, Rockspring Development, Inc. & Coal Related Industries			
Personal Property			
Year	Tax	Appraised Value	Board of Education
2013	\$ 1,583,304	\$ 112,355,185	\$ 1,158,282
2014	\$ 1,711,375	\$ 110,174,939	\$ 1,280,390
2015	\$ 1,652,069	\$ 100,568,453	\$ 1,230,910
2016	\$ 1,227,965	\$ 82,762,185	\$ 914,922
Deliquent Taxes	\$	2,944,431	
Tax loss to Board of Education	\$	2,194,237	
Loss of General County Revenues	\$	750,194	
Real Estate			
Year	Tax	Appraised Value	Board of Education
2013	\$ 118,955	\$ 8,571,256	\$ 87,023
2014	\$ 143,166	\$ 9,022,199	\$ 107,111
2015	\$ 124,979	\$ 7,668,903	\$ 93,118
2016	\$ 113,021	\$ 7,548,764	\$ 84,209
Deliquent Taxes	\$	238,000	
Tax loss to Board of Education	\$	177,327	
Loss of General County Revenues	\$	60,673	
Total (All Taxes)			
Year	Tax	Appraised Value	Board of Education
2013	\$ 1,702,259	\$ 120,926,441	\$ 1,245,305
2014	\$ 1,854,541	\$ 119,197,138	\$ 1,387,501
2015	\$ 1,777,048	\$ 108,237,356	\$ 1,324,028
2016	\$ 1,340,986	\$ 90,310,949	\$ 999,131
Deliquent Taxes	\$	3,182,431	
Tax loss to Board of Education	\$	2,371,564	
Loss of General County Revenues	\$	810,867	

Wayne County, West Virginia			
Tax Revenues 2013-2016			
Argus Energy			
Personal Property			
Year	Tax	Appraised Value	Board of Education
2013	\$ 292,415	\$ 21,065,873	\$ 213,919
2014	\$ 332,772	\$ 20,578,123	\$ 248,968
2015	\$ 282,115	\$ 17,782,868	\$ 210,196
2016	\$ 98,694	\$ 6,727,485	\$ 73,534
Deliquent Taxes	\$	380,809	
Tax loss to Board of Education	\$	283,730	
Loss of General County Revenues	\$	97,079	
Real Estate			
Year	Tax	Appraised Value	Board of Education
2013	\$ 62,834	\$ 4,435,116	\$ 45,967
2014	\$ 82,994	\$ 4,915,916	\$ 62,093
2015	\$ 57,518	\$ 3,534,070	\$ 42,855
2016	\$ 51,888	\$ 3,381,700	\$ 38,661
Deliquent Taxes	\$	-	
Tax loss to Board of Education	\$	-	
Loss of General County Revenues	\$	-	
Total (All Taxes)			
Year	Tax	Appraised Value	Board of Education
2013	\$ 355,249	\$ 25,500,989	\$ 259,886
2014	\$ 415,766	\$ 25,494,039	\$ 311,061
2015	\$ 339,633	\$ 21,316,938	\$ 253,051
2016	\$ 150,583	\$ 10,109,185	\$ 112,195
Deliquent Taxes	\$	380,809	
Tax loss to Board of Education	\$	283,730	
Loss of General County Revenues	\$	97,079	

Wayne County, West Virginia			
Tax Revenues 2013-2016			
Rockspring Development, Inc.			
Personal Property			
Year	Tax	Appraised Value	Board of Education
2013	\$ 1,235,375	\$ 91,196,788	\$ 830,834
2014	\$ 1,312,082	\$ 89,485,946	\$ 981,653
2015	\$ 1,311,370	\$ 82,687,945	\$ 977,065
2016	\$ 1,115,106	\$ 76,011,091	\$ 830,834
Deliquent Taxes	\$	2,426,475	
Tax loss to Board of Education	\$	1,807,899	
Loss of General County Revenues	\$	618,577	
Real Estate			
Year	Tax	Appraised Value	Board of Education
2013	\$ 56,121	\$ 4,136,140	\$ 41,056
2014	\$ 60,171	\$ 4,106,283	\$ 45,018
2015	\$ 67,461	\$ 4,134,833	\$ 50,263
2016	\$ 61,132	\$ 4,167,067	\$ 45,548
Deliquent Taxes	\$	-	
Tax loss to Board of Education	\$	-	
Loss of General County Revenues	\$	-	
Total (All Taxes)			
Year	Tax	Appraised Value	Board of Education
2013	\$ 1,291,496	\$ 95,332,928	\$ 871,890
2014	\$ 1,372,254	\$ 93,592,229	\$ 1,026,671
2015	\$ 1,378,831	\$ 86,822,778	\$ 1,027,328
2016	\$ 1,176,238	\$ 80,178,158	\$ 876,382
Deliquent Taxes	\$	2,426,475	
Tax loss to Board of Education	\$	1,807,899	
Loss of General County Revenues	\$	618,577	

Wayne County, West Virginia Coal Tax Revenues 2013-2016			
Coal Related Industries (Walker Machinery, GE Capital, Lincoln Leasing)			
Personal Property			
Year	Tax	Appraised Value	Board of Education
2013	\$ 55,514	\$ 92,524	\$ 40,612
2014	\$ 66,522	\$ 110,870	\$ 49,769
2015	\$ 58,584	\$ 97,640	\$ 43,649
2016	\$ 14,165	\$ 23,609	\$ 10,544
Deliquent Taxes *	\$	137,147	
Tax loss to Board of Education	\$	102,608	
Loss of General County Revenues	\$	34,538	
<i>* Balance of deliquent taxes is attributable to Lincoln Leasing</i>			
Real Estate			
Year	Tax	Appraised Value	Board of Education
2013	\$ -	\$ -	\$ -
2014	\$ -	\$ -	\$ -
2015	\$ -	\$ -	\$ -
2016	\$ -	\$ -	\$ -
Deliquent Taxes	\$	-	
Tax loss to Board of Education	\$	-	
Loss of General County Revenues	\$	-	
<i>* Balance of deliquent taxes is attributable to Lincoln Leasing</i>			
Total (All Taxes)			
Year	Tax	Appraised Value	Board of Education
2013	\$ 55,514	\$ 92,524	\$ 40,612
2014	\$ 66,522	\$ 110,870	\$ 49,769
2015	\$ 58,584	\$ 97,640	\$ 43,649
2016	\$ 14,165	\$ 23,609	\$ 10,544
Deliquent Taxes	\$	137,147	
Tax loss to Board of Education	\$	102,608	
Loss of General County Revenues	\$	34,538	
<i>* Balance of deliquent taxes is attributable to Lincoln Leasing</i>			

1 reduction in force, and we were told that we wouldn't
2 have to see that kind of reduction possibly until the
3 beginning of 2016. But unfortunately, that wasn't the
4 case. We were the only company in Arch Coal that had
5 not suffered such a loss in workforce.

6 Every Monday during our weekly safety
7 meetings we were told how increasingly difficult it was
8 becoming to acquire mining permits due to EPA
9 regulations. Weekly we were told how fortunate we were
10 to not have our pay cut and how fortunate we were to
11 even be mining and still working in general. My duties
12 as a maintenance planner required me to work in an
13 office. That's where I saw numerous state and federal
14 mine inspectors that would come to our jobs as they
15 started their inspections.

16 With increasing regulations forcing other
17 mines to close, we'd see more and more inspectors on our
18 job. At one point we had 12 inspectors on our property
19 on the same day. They told us that they were all there
20 because they had nowhere else to go. Many times we
21 would see underground inspectors who had no idea what
22 they were looking at because they had never been on a
23 surface mine. What would -- that would lead to more
24 violations because of their interpretation of our laws.

1 And as we all know, more violations lead to higher costs
2 per ton, higher cost per ton leads to less profits and
3 less profits lead to job loss.

4 My job also required me to build
5 relationships with vendors that performed various tasks
6 related to our industry. As each major coal corporation
7 has faced bankruptcies and downsizing, every vendor down
8 the line has had to face the same ramifications of those
9 actions. From large companies like Walker Machinery to
10 smaller, locally owned companies like Guyan Heavy
11 Equipment, every vendor that's related to our industry
12 has taken their share of loss due to this
13 administration's EPA overreach. For every coal mining
14 job lost, there are countless more that are also
15 affected.

16 Heavy equipment vendors face the hardship of
17 trying to keep people working versus making a profit.
18 School administrators face decreased funding because
19 their enrollments have dropped due to people moving to
20 find work. Many commercial businesses locally have
21 closed their doors due to the lack of spending in our
22 region, and many small business owners -- just like my
23 wife -- see a decline in their business because people
24 don't have extra money to pay for things that are

1 outside of their necessities. Our entire state feels
2 the ramifications of a targeted industry.

3 My family has been very fortunate to have my
4 wife's photography business to help sustain us in what
5 otherwise would be a very dark time, but many coal
6 miners don't have that luxury. They don't have the
7 second income to depend on like we do.

8 For many years coal mining has produced
9 great wages that have allowed spouses the opportunity to
10 be stay-at-home parents and to be able to do the various
11 things that are vital for a family to operate and
12 function properly. For a long time, my wife didn't --
13 she didn't have a second job. She didn't have the small
14 business because we felt it was more important for her
15 to be at home to raise our children so we didn't have to
16 put them in daycare, and working in a coal mine provided
17 us that opportunity.

18 Finally, but definitely most importantly,
19 our family's faith in God as our provider,
20 Jehovah-Jireh, has allowed us to be able to carry on
21 with our everyday life. Our God is able to bring his
22 people through any circumstance that they may face, and
23 we believe that West Virginian's unwavering faith in God
24 is what will separate us from those who mean to do us

1 harm. Our faith in Him will guide us to the type of
2 people and leaders that will ultimately lead us to
3 prominence.

4 While coal is not a nonrenewable energy
5 source, I believe that He has given us this resource to
6 provide clean and affordable energy. I also believe
7 that He will lead us to elect the type of people that
8 will allow us to use this energy source until a better
9 all-around source is available to compete with, if not
10 eventually take its place.

11 I want to thank you again for the
12 opportunity to be here today and to speak before this
13 committee, to share concerns on behalf of so many
14 people. In our great state it is a tremendous honor
15 that I don't take lightly, and I pray that I'm able to
16 represent the people of this state in a way that shows
17 the honor and dignity that they truly deserve.

18 So have a good afternoon and God bless you.

19 SENATOR MANCHIN: Thank you. That certainly
20 is honor and dignity. Thank you.

21 Our next panelist is Ms. Karan Ireland with
22 the West Virginia -- she's the program director for West
23 Virginia SUN. She's also an at large member of the
24 Charleston City Council --

Written Statement of Jimmy "Bo" Copley
Former WV Coal Miner
Before the U.S. Senate Environment and Public Works Committee
EPA's Regulations and Their Impact on West Virginia
October 5, 2016

Good afternoon. Senator Capito and esteemed guests, thank you for asking me to be here today. My name is Jimmy "Bo" Copley. I am a 39 year old child of God, husband to 1, father of 3, proud West Virginian, and a former coal miner. I was formerly employed at Coal Mac, Inc. in Holden, WV (a subsidiary of Arch Coal in St. Louis, MO) from July 26, 2004 to September 18, 2015. My duties there were that of a maintenance planner, EMT, rescue team member, and certified surface mine foreman.

Just slightly over 1 year ago, I was notified that my services were no longer required, due to a reduction in force. Although we were told that we shouldn't have to reduce our workforce before the beginning of 2016, we should have known that we wouldn't make it that long without one. Our company was the only one in Arch that had not experienced such a reduction. Every Monday during our weekly safety meetings, we were told how increasingly difficult it was becoming to acquire mining permits due to EPA regulations. Weekly, we were told how fortunate we were to not have our pay cut, and how fortunate we were to be working, in general.

My duties as a maintenance planner required me to work in an office. That's where I saw the numerous state and federal mine inspectors that would come to our job as they started their inspections. With increasing regulations forcing other mines to close, we would see more and more inspectors on our job. At one point, we had 12 inspectors on our property on the same day. They told us they were all there that day because they had nowhere else to go. Many times, we would see underground inspectors who had no idea what they were looking at because they had never been on a surface mine. That would lead to more violations because of their interpretation of laws. More violations lead to higher cost per ton. Higher cost per ton leads to less profits. Less profits lead to job loss.

My job required me to build relationships with vendors that performed various tasks related to our industry. As each major coal corporation has faced bankruptcies and downsizing, every vendor down the line has had to face the ramifications of those actions. From large companies like Walker Machinery to smaller, locally owned companies like Guyan Heavy Equipment, every vendor that is related to our industry has taken their share of loss due to this administration's EPA overreach. For every coal mining job lost there are countless more that are also affected. Heavy equipment vendors face the hard ship of trying keep people working versus making a profit. School administrators face decreased funding because their enrollments have dropped due to people moving to find work. Many commercial businesses have closed their doors due to the lack of spending in our region. Many small business owners, just like my wife, see a decline in their business because people don't have the extra money to pay for things outside their basic needs. Our entire state feels the ramifications of a targeted industry.

While my family has been fortunate to have my wife's photography business to help sustain our family in what would otherwise be a dark time, many coal miners don't have that second income on which to depend. For many years, coal mining has produced great wages that have allowed spouses the opportunity to be stay at home parents and to be able to do the various things that are vital for our families to operate and function properly.

Finally, but definitely most importantly, our family's faith in God as our Provider (Jehovah Jireh) has allowed us to be able to carry on with our everyday life. Our God is able to bring His people through any circumstance they face, and we believe that West Virginians' unwavering faith in God is what will separate us from those who mean to do us harm. Our faith in Him will guide us to the type of people and leaders that will ultimately lead us to prominence. While coal is not a renewable energy source, I believe that He has given us this resource to provide clean, affordable energy. I also believe that He will lead us to elect the type of people that will allow us to use this energy source until a better, all-around source is available to compete with, or eventually, take its place.

Thank you, again, for the opportunity to speak before this committee today. To share concerns on behalf of so many people in our great state is a tremendous honor that I don't take lightly, and I pray that I am able to represent my brothers and sisters in a way that shows the honor and dignity that they deserve. Have a good afternoon, and may God bless you.

1 MS. IRELAND: That's correct.

2 SENATOR CAPITO: -- and on Urban Renewal in
3 Charleston.

4 MS. IRELAND: Yes.

5 SENATOR CAPITO: So you're my city
6 councilwoman.

7 MS. IRELAND: Yeah. Absolutely.

8 SENATOR CAPITO: Welcome.

9 MS. IRELAND: Thank you, Chair Capito.

10 SENATOR CAPITO: And yours too.

11 MS. IRELAND: That's right.

12 Thank you Chair Capito and Senator Manchin
13 and Congressman Jenkins for the opportunity to talk here
14 today. So I'm talking to you as both a person who works
15 in renewable energy and also as an elected official that
16 is responsible to my constituents and who knows
17 intimately what it's like to fight to retain and attract
18 population and make sure that people have a way to make
19 a fair living. And I'm also here as a proud West
20 Virginian. I -- and I really appreciate hearing
21 Mr. Copley's comments.

22 West Virginia SUN is a nonprofit that helps
23 communities start their own solar co-ops. So when
24 people are interested in going solar, that can be a --

1 sometimes complex process if you don't know what
2 questions to ask. So we help communities come together
3 and learn more about solar power, and we help them with
4 competitive bids and help them ultimately install solar
5 arrays -- usually on their homes but sometimes on their
6 businesses.

7 And part of our overall goal is to scale the
8 solar industry in West Virginia, and I wanted to talk a
9 little bit about the economic opportunities related to
10 increasing renewable energy and energy efficiency as
11 part of West Virginia's compliance under the Clean Power
12 Plan.

13 When I started with West Virginia SUN one
14 year ago -- just a little bit over a year ago, as I
15 said, we'd go around the state and help different
16 communities -- like Morgantown had a successful co-op,
17 Fayette County, Monroe County -- and we solicit bids.
18 And when I started, it was almost impossible to get a
19 bid from a West Virginia company. And I'm happy to say
20 that a year later, almost all of our bids come from
21 people working in West Virginia -- West Virginians who
22 are certified solar installers.

23 And that's exciting, but it just hints at
24 what's happening nationwide. Renewable energy jobs have

1 grown. They've outpaced all other job creation -- forms
2 of job creation by a factor of 12, and so we expect to
3 see that start happening in West Virginia as demand
4 grows.

5 As a member of Charleston City Council, like
6 I said, I'm familiar with the challenges of population
7 loss and what that does to the tax base, what it does to
8 rate payers, and we are consistently seeking new ways to
9 attract and retain young families. It's clear that West
10 Virginia's economy is in transition and has been in
11 transition due to a convergence of factors, and so I'm
12 here today, I guess, just to say that I think we need to
13 take advantage of the opportunities in some of these
14 emerging energy sectors while we have the chance.

15 Finally, as a West Virginian, I understand
16 and appreciate how important coal is to our state and
17 our very identity. I have felt the frustration of
18 talking to friends from out of state who think they have
19 all the answers to climate change or energy policy, but
20 they don't seem to appreciate that they owe -- we all
21 owe a debt of gratitude for every modern convenience
22 that we have. And that's to the people who have mined
23 coal -- mined coal in this state, and I do appreciate
24 that. And I'm proud to have stood with UMW workers in

1 demanding safe work practices and the payment of
2 benefits that they worked hard to earn.

3 Compliance under the Clean Power Plan does
4 not mean right now at least no coal. We truly can have
5 an all-of-the-above energy portfolio and at the same
6 time take advantage of the job and wealth creation that
7 comes with investment in emerging energy sectors. In
8 this way, West Virginia can continue to be a leading
9 energy state.

10 We have the flexibility to do that. We have
11 flexibility in how we comply. And energy efficiency and
12 renewable energy should be central to the plan for
13 compliance so that we can at least enjoy the economic
14 gains and the sharp increase in clean energy jobs that
15 we've seen across the rest of the country, and will also
16 help mitigate the negative consequences we see related
17 to compliance.

18 And I want to thank you for having me today.
19 I also like to be in Southern West Virginia so thanks.

20 SENATOR CAPITO: Thank you very much.

21 And our final panelist is -- participated in
22 a similar panel that we had in Morgantown, and I
23 appreciate that. And I appreciate that Mr. James Van
24 Nostrand has returned. He's a professor of law and

Testimony of Karan Ireland

Program Director, WV SUN

U.S. Senate Committee on Environment and Public Works
Subcommittee on Clean Air and Nuclear Safety
Field Hearing in Logan, WV
October 5, 2016

“Examining the Local Impacts of EPA’s Climate Regulations”

My name is Karan Ireland. I am the Program Director of WV SUN. WV SUN is a project of Community Power Network (CPN), a national nonprofit that helps communities start their own solar co-ops, protect their right to produce power, and implement policies and project models that expand access to solar energy. I am here today to testify about economic opportunities related to increasing renewable energy and energy efficiency as a part of West Virginia’s compliance under the Clean Power Plan.

WV SUN works to scale the solar industry in WV by implementing solar cooperatives in communities across the state. Each solar cooperative is led by local community partners and allows each community to coalesce around goals for local economic development. Community members seek us out when they want to save money by going solar, create local jobs, and attract and scale employment opportunities with solar companies in their area.

WV SUN is committed to supporting and stimulating a growing competitive and consumer friendly solar market. Our methodology of gathering, organizing and educating homeowners provides an essential cost-saving service for solar companies. By finding, screening and educating potential customers we stimulate solar companies to transition from a small-staff, high-margin, low-volume business model to a larger staff, low-margin, high-volume business. We continually see the companies we work with scale up – from small mom-and-pop operations to significant companies employing 25 or more employees.

We recognize that renewable energy sources and energy efficiency programs create new employment paths for area residents, and help these counties generate wealth and keep this wealth in the local economy. WV SUN's co-op model is intended to help consumers go solar, but is also intended to jumpstart the West Virginia solar industry and create demand for additional solar jobs. Likewise, energy efficiency improvements create jobs and a demand for skilled labor. Because the State is allowed flexibility in how it complies with the CPP, we believe that renewables and energy efficiency measures should be a central part of compliance, in order for West Virginia to reap the rewards of these two, virtually untapped job markets.

West Virginia, along with its neighboring Appalachian states, is in the midst of a critical economic transition that has been caused by a number of converging factors. There has been prolonged underinvestment in local small businesses, job skills training, energy and economic diversification. Many communities face an acute need for more, well-paying jobs and a skilled workforce that can fill those jobs. West Virginia has lost jobs and population for the past two-three years, and the state has the lowest labor force participation rate in the country, at just 53% (http://www.be.wvu.edu/bber/outlook_pdfs/WVEconomic-Outlook-2016.pdf). The 2015 annual unemployment rate for the six counties we plan to work in for this project was between 4.7% and 7.3% (<http://data.bls.gov>).

These are large challenges, as are the challenges created by the provisions set forth in the Clean Power Plan, and will require numerous solutions from across sectors and geographies. These solutions should include increases in renewable energy and energy efficiency improvements. Right now, West Virginia ranks near the bottom on scorecards for renewable energy deployment and energy efficiency gains. The potential for growth in these industries is significant.

For instance, the solar industry is growing exponentially around the country as prices have dropped and demand has soared. Between 2009 and 2014, the cost of going solar dropped by 50% (https://emp.lbl.gov/sites/all/files/lbnl-188238_2.pdf), and research groups estimate that prices will continue to fall, possibly dropping another 40% by 2020. This shift has happened in conjunction with tremendous growth in solar deployment, and in solar jobs. Since 2009, the installed capacity of residential-scale solar in the U.S. has increased roughly 900%, and the number of U.S. solar jobs has increased 123% (<http://www.thesolarfoundation.org/national>).

The American Council for an Energy-Efficient Economy (ACEEE) estimates that there could be a net increase of 1.3 to 1.9 million jobs in energy efficiency industries across the country by 2050, if the United States would invest heavily in energy efficiency. Right now, ACEEE ranks West Virginia 44th on its energy efficiency scorecard, reinforcing the notion that there could be major job growth in this sector if the State were to make it a central part of its compliance plan under the CPP.

Renewables and energy efficiency have the potential to make a huge impact not only in changing how communities obtain and use energy, but in generating wealth within communities. The economic development opportunities presented by renewables and energy efficiency programs fall into two categories: (1) job creation, and (2) wealth creation and retention.

Economic Development Opportunity #1: Job Creation. Renewable energy companies require a wide variety services, including: system design, engineering, installation, financing, sales, marketing and legal support. Other potential job functions include operations, and project management. The solar industry, in particular, includes over 40 different career paths across four sectors, presenting ample opportunities for both skilled and unskilled workers

(<http://irecsolarcareermap.org>). Military skills also translate particularly well to the solar industry, and a number of programs exist to support solar jobs training for veterans (<http://www.thesolarfoundation.org/solar-ready-vets>).

A study by the Solar Foundation demonstrated that wages paid to solar workers are competitive with similar industries and provide many living-wage opportunities. The average wage in the industry is \$20-\$24/hour, and internal staff earn approximately \$44/hour. The solar industry is also adding workers at a rate 12 times faster than the overall economy, and accounted for 1.2% of all jobs created in the U.S. in 2014. In 2014, West Virginia had only 15 solar companies, but by December 2015 this had nearly doubled to 26 solar companies, which employ 350 people in the state. Building demand for solar energy will spur this growing market, injecting more investment into each county's economy and creating more well-paying, locally-based solar jobs.

WV SUN specifically has helped more than 50 West Virginians go solar, facilitated over \$1 million of private investment in the local economy, and saved co-op members over \$172,000 in energy costs over the lifetime of their solar installations. Since 2014, because of a marked increase in demand for solar co-ops from communities, we are seeing an increasing number of West Virginia installers bidding on the co-op work.

Many of these West Virginia companies are new, and some got their start as crew members for out-of-state companies who had won WV SUN co-op work in the past. For example, one of our most recent West Virginia co-ops, the Tucker/Randolph Solar Co-op, selected local company Praxis Solar & Electric as its installer. Christopher Danz, the founder of Praxis, got his start working for AAT Solar, an Ohio firm, on WV SUN's Fayette, Wheeling, and

Kanawha County co-ops. Now, Mr. Danz and his company are routinely bidding on WV SUN co-ops and offering selection committees yet another local choice for their solar installations.

AAT Solar continues to employ West Virginians looking to transition into solar work. When it won the Kanawha County co-op, two of its regular installation crew were former miners who had recently been laid off in Southern West Virginia.

WV SUN is not the only organization that is seeing the demand for solar drive demand for new solar jobs. Brandon Dennison, CEO of Coalfields Development Corporation, cited their solar certification program as an example of employment created as a result of the increasing demand for solar energy. Requests for solar installations were routinely taking time and manpower away from Coalfields' regular construction business until a decision was made to spin off four employees to create a venture called ReWire Appalachia to handle the solar business. ReWire Appalachia recently installed the largest solar array in the city of Huntington and the crew was led by Robert Adkins, a former coal miner.

In an interview with the Herald-Dispatch, Adkins had this to say, "Right now there are so many good, smart, intelligent men that have been laid off and are being overlooked. Just because you are dirty and you're oiled up and you've got scars on your hands doesn't mean that you are not able to learn and adapt to new things. For me, solar is an opportunity to change the area."

Likewise, energy efficiency retrofits and programs require skilled craftsmen, but also engineers, planners, and financiers to implement them. These are jobs that pay a fair wage, and – by their nature- cannot be outsourced.

Economic Development Opportunity #2: Wealth Creation. Solar is an instrument for homeowners, small businesses and farms to improve their disposable income, and generate

wealth. An average home solar installation is valued at roughly \$15,000 and generates about \$30,000 in value over its lifetime. Revenue comes from both electricity bill savings and solar renewable energy certificate (SREC) payments. The systems also protect owners against future electric rate hikes, and increase a home's value by an estimated \$13,000 - \$16,000. Therefore, a solar co-op with just 25 members that go solar generates an estimated \$750,000 in revenue for the participants, facilitates \$375,000 in local spending, and increases home values by up to \$400,000. According to studies conducted by the U.S. Department of Energy, the vast majority of this money stays in the community and is reinvested, creating a large multiplier effect (http://www1.eere.energy.gov/wip/solutioncenter/pdfs/clean_energy_investment_cases.pdf). For most of the West Virginia counties that WV SUN works in, this multiplier effect on the local economy is roughly 2.2% – meaning that every dollar saved by co-op participants will create \$2.20 in new income for the local community.

Energy efficiency improvements are also a way to keep wealth in a community, as well as one of the best ways to mitigate any potential energy cost increase that compliance with the CPP might precipitate. In 2015, Appalachian Power customers saved 47.8 million kWh as a result of Appalachian Power's energy efficiency programs. Meanwhile, Mon Power and Potomac Edison (MP/PE) programs saved less than 17 million kWh. Given that MP/PE have more customers than Appalachian Power, on a per-customer basis, MP/PE's savings are more than two-thirds lower.

This disparity is a result of the utilities' choices. Appalachian Power has recognized the importance of energy efficiency as a tool for helping consumers save money on bills. Moreover, Appalachian Power knows that energy efficiency is a low cost resource - it is cheaper for

Appalachian Power to invest in energy efficiency programs than to spend money generating that same amount of power.

Lastly, solar and energy efficiency programs can provide additional benefits for low-income homeowners. Thus far, low-income communities have been mostly left out of these markets, even though they can be a long-term, relatively low-cost solution to heating and energy bill assistance. By conserving or generating their own power, low-income families can protect themselves against rising energy rates, increase their monthly disposable income, and create local investment that stays in their community. Additionally, homeowners who have gone through an energy efficiency audit with an education component and members of a solar co-op become more educated about policy issues affecting their lives, and methods for impacting policy makers, such as public meetings and city council hearings. This helps to give low-income individuals a voice where they previously have not had one.

West Virginia should take advantage of the flexibility afforded to states by the Clean Power Plan and create a plan for compliance that really does constitute an “all of the above” energy policy. Energy efficiency and renewable energy should be central to the plan for compliance so that West Virginia can enjoy economic gains and the sharp increase in clean energy jobs that we’ve seen across the country, as well as mitigate any negative consequences related to compliance.

1 director of the Center of Energy and Sustainable
2 Development at West Virginia University College of Law.
3 Welcome.

4 MR. VAN NOSTRAND: Thank you very much,
5 Senator Capito. It's good to see you, Senator Manchin,
6 Congressman Jenkins again. I really appreciate being
7 invited to this hearing. I appreciate having it being
8 held in Logan County, a very beautiful part of the state
9 and a beautiful day for a drive.

10 I've been in West Virginia only since July
11 2011. I can't claim to have the deep roots that either
12 Karan or Bo or the other panelists have. I can't claim
13 to have a deep understanding of the history and the
14 culture of the state. I've done a lot in the last five
15 years to catch up and to get up to speed on the issues
16 that are important to West Virginia.

17 We've had five energy conferences at WVU.
18 Senator Manchin's keynoted at two of them. Senator
19 Manchin and Congressman Jenkins both participated in our
20 last conference via video.

21 And I got to say, one of things you hear a
22 lot about and Congressman Jenkins mentioned it this
23 morning is the war on coal. And so I've spent a lot of
24 time studying the war on coal -- the drivers for that.

1 And I guess I characterize them more as the forces that
2 are aligned against the coal industry in West Virginia.

3 But sticking with the war analogy, here is
4 my take on the artillery that's being deployed in this
5 war. First, the main driver is economics -- primarily
6 cheap natural gas which has been referred to a few times
7 this morning is resulted in massive displacement of
8 coal-fired generation with highly efficient, new
9 combined-cycle combustion turbines. In terms of the
10 artillery in the war on coal, this is the aircraft
11 carrier. It's a Nimitz class aircraft carrier. It's
12 the big dog.

13 Second is geology. The cheap seams are gone
14 in central Appalachia. We're working our way up the
15 cost curve. Our coal is more expensive. Our mines are
16 less productive. Not because our miners are working
17 less hard, but the -- the productivity is simply gone.
18 The mines are less productive. And in terms of the
19 artillery of the war on coal, this is probably a
20 destroyer. It's damaging but it's not a game-changer.

21 Third, I would point to climate change. Not
22 in the sense that we get it in West Virginia or even get
23 it in the United States of America. Sometimes I think
24 we'll be debating that until the coasts are under the

1 water due to sea level rise or our valleys and hollows
2 continue to be flooded by extreme weather events. It's
3 in the sense that the world gets it. And they aren't
4 going to be buying any more of our coal for exports.

5 And Senator Manchin might know this -- India
6 signed the Paris Agreement on Sunday and it was
7 ratified. And it's now going to be taking effect
8 because we now have enough countries that are part of
9 that. But in terms of the artillery of the war on coal,
10 this is maybe a submarine. It's underwater but it's
11 having some impact.

12 And then finally what we're here to talk
13 about today, it's the EPA and the Clean Power Plan. And
14 I've read documents from this issue by this
15 administration over the last seven years. I would say
16 there's certainly been a hostility towards mountaintop
17 removal, and there's been a clear desire to address
18 climate change through reducing greenhouse gas
19 emissions. Coal is obviously the biggest source of
20 greenhouse gas emissions.

21 But in terms of its impact, it's something
22 like a shoulder-fired rocket launcher. A tool to be
23 deployed in minor skirmishes, but it's not going to win
24 a war. We're spending all our time and energy talking

1 about the casualties we are suffering in this war from
2 things getting occasionally blown up with a rocket
3 launcher. The real heavy fire is coming from economics
4 and geology and international concern about climate
5 change.

6 I'd like to talk a little bit more about the
7 battleship -- the aircraft carrier that's the economic
8 forces. There's a revolution underway in the energy
9 industry in the United States. It's not just cheap
10 natural gas. It's wind technology which keeps
11 improving.

12 Charles Patton spoke at our conference in
13 April and talked about Appalachian Power doing an RFP.
14 \$46 a megawatt for a wind farm in southern Indiana.
15 Wind technology keeps getting better. It's more
16 competitive.

17 Solar photovoltaics have gotten so cheap
18 it's a fundamental threat to the utility business model
19 around the country. In many states customers are not
20 that far from being able to drop off the grid entirely.
21 We have energy efficiency demand response. Using
22 technology to help people manage their energy costs.
23 There's truly a revolution underway in the
24 energy industry.

1 And what are we doing about it? How are we
2 doing in West Virginia in that revolution? We're
3 getting killed by friendly fire. For the last several
4 years virtually everything that we have done in this
5 state has been in the wrong direction from what it takes
6 us to position ourselves well in this new energy
7 economy.

8 We've got the alternative renewable energy
9 portfolio standard was passed when Senator Manchin was
10 governor. That was repealed in one of the first actions
11 of the legislature last year. We now have nothing to
12 promote renewable energy in the state. There's nothing
13 to encourage energy efficiency that Karan talks about.

14 The legislature passed a law to handcuff the
15 DEP in developing a compliant strategy for the Clean
16 Power Plan that would minimize the compliance cost for
17 West Virginia -- be least disruptive to our economy.
18 DEP is handcuffed from adopting the least disruptive
19 plan.

20 The legislature went after net meterings.
21 Well, the solar potential that Karan talks about is very
22 much in peril because there's a cloud of uncertainty
23 hanging over net metering. We have one utility that's
24 positioning to buy an uneconomic coal plant and put in

1 the rate bases in West Virginia as though we're going to
2 win the war on coal they're putting on the backs of West
3 Virginia rate payers.

4 It's a new game in the energy industry.
5 It's about zero carbon or low carbon resources, and the
6 markets that are coming into play as a result of that.
7 It's all about carbon allowances and carbon credits.
8 And as West Virginia get's ready to participate in this
9 new game, we have a zero balance in our account.

10 I know Mr. Trisko talked about subsidizing
11 renewable projects outside the State of West Virginia.
12 It does not need to be that way. We can be building
13 those renewable projects in West Virginia. We can be
14 investing in energy efficiency in West Virginia.

15 And we can -- we have the resources. We
16 have the people. We can succeed in this new game --
17 this new energy economy. But we have a tremendous
18 opportunity, but we need to keep our eye -- what are the
19 drivers of this change in order to craft a solution
20 that's going to make us be winners in this new energy
21 economy.

22 Thank you very much.

23 SENATOR CAPITO: Thank you. Thank you all
24 very much. And now we'll move to the question portion.

Testimony of James M. Van Nostrand

Professor and Director, Center for Energy & Sustainable Development
West Virginia University College of Law

U.S. Senate Committee on Environment and Public Works
Subcommittee on Clean Air and Nuclear Safety
Field Hearing in Logan, WV
October 5, 2016

“Impacts of EPA Regulations on West Virginia’s Coal Production, Employment, Air Quality, Community Wellness, Climate Risk, and Local Government Operations”

My name is James M. Van Nostrand. I am a Professor of Law and Director of the Center for Energy & Sustainable Development at the WVU College of Law. The Center is an energy and environmental research organization founded in 2011, with a focus on promoting practices that balance the continuing demand for energy resources—and the associated economic benefits—alongside the need to reduce the environmental impacts of developing the nation’s natural resources. I appreciate the opportunity to provide testimony at this field hearing regarding the impacts of regulations of the U.S. Environmental Protection Agency (EPA) on West Virginia and, in particular, coal production, employment, air quality and community wellness, climate and local government operations.

The Center has been following closely the actions of the EPA in regulating greenhouse gas (GHG) emissions from power plants. The Center’s third annual national energy conference, held in February 2014, focused on the then-anticipated proposed rules under 111(d) of the Clean Air Act. The conference, titled “Regulation of CO₂ Emissions from Power Plants: Flexibility and the Path Forward for Coal Dependent States,” brought together representatives from government, industry, labor, academia, and the environmental community for a day-long discussion about challenges and opportunities for coal dependent states. Senator Manchin was the keynote speaker at that event and, in his remarks, acknowledged the role of human activity in contributing to climate change. In June 2014, the Center commenced a long-term research project, funded with a grant from the Appalachian Stewardship Foundation and conducted jointly with Downstream Strategies, to examine the impact of the Clean Power Plan on West Virginia, and to develop possible compliance strategies for the Mountain State. The project is part of a broader Center initiative to support constructive dialogue around energy policy choices in West Virginia that would enhance economic opportunity, reduce the environmental impacts of energy development, and put West Virginia on track to meet its CO₂ emission reduction obligations under the Clean Power Plan.

As part of that project, the Center released a Discussion Paper in October 2014 that previewed a preliminary analysis of one potential Compliance Scenario for West Virginia under

the proposed Clean Power Plan.¹ In June 2015, the Center released a more comprehensive report analyzing the proposed rule, *The Clean Power Plan and West Virginia: Compliance Options and New Economic Opportunities*.² That report modeled five possible compliance scenarios under the proposed rule, and offered policy recommendations that would help West Virginia better capture the emission-reduction opportunities and economic benefits that could result from developing an all-of-the-above energy strategy. Following EPA's issuance of its Final Rule in the summer of 2015, the Center on July 21, 2016 issued its final report, *Expanding Economic Opportunities for West Virginia under the Clean Power Plan*.³ That report includes results from modeling two different scenarios that demonstrate the feasibility of meeting West Virginia's Clean Power Plan obligations, and offers policy recommendations that would help to put West Virginia on track to meet carbon pollution standards while further expanding the state's energy sector, promoting economic growth, creating new job opportunities, and providing energy savings to consumers. My testimony today draws upon many of the findings and recommendations from the Center's July 2016 final report.

The Coal Mining Communities of West Virginia

There is no question that the coal mining communities of southern West Virginia are bearing the consequences of a global transition to clean energy. Demand for coal continues to decline as utilities switch to natural gas-fired generation and renewable energy resources, while regulation of fossil fuel pollutants has become more stringent due to concerns about public health and the global climate. Policymakers at the federal level are recognizing the pressing need for addressing the devastating impacts being borne by coal communities arising from this clean energy transition. President Obama's POWER+ Plan, for example, is a \$10 billion initiative to assist communities struggling with the decline of the coal industry in growing and diversifying their economies.⁴ In August 2016, more than \$38.8 million in funding was awarded to groups in the Appalachian region for efforts in education, infrastructure improvements, business development, manufacturing expansions and workforce training.⁵

To focus attention on the pressing needs of the coal mining communities of West Virginia, the Center focused its fifth annual energy conference on these issues, *Building a Resilient West Virginia: Taking Control of the Mountain State's Future*, co-presented with the John D.

¹ *Carbon Dioxide Emission Reduction Opportunities for the West Virginia Power Sector*, CENTER FOR ENERGY & SUSTAINABLE DEVELOPMENT, available at <http://energy.law.wvu.edu/r/download/201008>.

² Available at <http://energy.law.wvu.edu/files/d/e9535d93-d237-42b2-8305-175ec728fce4/cpp-final-6-14-2015-1.pdf>

³ Available at <http://energy.law.wvu.edu/files/d/585cffe-0aea-4535-84d0-7344591cfbb8/cpp-phase-ii-final.pdf>

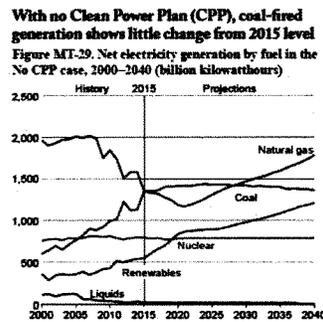
⁴ The President's Budget, Fiscal Year 2016, available at https://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/fact_sheets/investing-in-coal-communities-workers-and-technology-the-power-plan.pdf

⁵ Andrew Brown, *Federal grants from POWER Plus Plan Announced for WV*, CHARLESTON GAZETTE-MAIL, Aug. 24, 2016, available at <http://www.wvgazette.com/news-business/20160824/federal-grants-from-power-plus-plan-announced-for-wv#sthash.xcsEvMJU.dpuf>

Rockefeller IV School of Policy and Politics. The April 2016 conference featured former Senator Rockefeller as the keynote speaker, and also included video presentations by Senator Manchin and Congressman Jenkins. The program examined fundamental changes underway in the generation of electricity, trends in Appalachian coal production and energy sector employment, followed by a closer look at programs currently being offered in Central Appalachia (e.g., Coalfield Development Corporation, Eastern Kentucky Concentrated Employment Program, Refresh Appalachia) as well as a panel discussion regarding the necessary elements of a successful program for providing transition assistance for coal-reliant communities (which included Eugene Trisko, representing the United Mine Workers). The conference concluded with an examination of the resources available to assist in this transition, with participation by the Benedum Foundation and the Rockefeller Family Fund.

The Drivers of this Transition

While it is beyond dispute that coal communities in West Virginia, and coal-reliant communities across the U.S., have suffered disproportionately harsh impacts from the transition away from coal, the same clarity does not extend to identifying the drivers of this transition. On a national level, the decline in natural gas prices since 2009 has threatened the cost competitiveness of existing U.S. coal-fired generators, resulting in a 25 percent reduction in coal-fired generation in 2015 from its level in the mid-2000s. In its Annual Energy Outlook for 2016, the Energy Information Administration (EIA) modeled two scenarios—one assuming implementation of the Clean Power Plan, and the other without any impacts of the Clean Power Plan. Under its “No CPP” scenario, the coal share of total electricity generation falls from 48 percent in 2008 to 31 percent in 2029, when the natural gas share surpasses it, and then continues to decline, falling to a 26 percent share in 2040. So in other words, even in the absence of the Clean Power Plan, coal generation is essentially flat from 2015 to 2040.



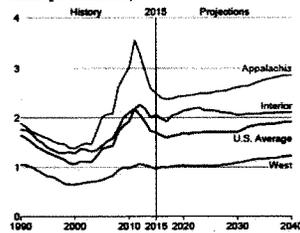
Source: EIA, 2016 Annual Energy Outlook at MT-16

In addition to these national trends, West Virginia bears the impacts of other factors that contribute to the decline of coal production: lower productivity of mines in Central Appalachia,

and the retirement of aging coal plants. With respect to the former, EIA's Annual Energy Outlook for 2016 projects that average minemouth coal prices in the Appalachian region will increase by 0.5 percent/year from 2015–40 as mine productivity continues to decline, thereby jeopardizing the cost-competitiveness of West Virginia coal versus other coal-producing regions of the country. With respect to the latter factor, sixteen coal plants operated in West Virginia in 2012, generating approximately 95 percent of the electricity produced in the state. Six of the plants that operated in 2012 have since deactivated, however, representing a loss of approximately 17 percent of the state's total generating capacity. The retiring plants have operated for an average of 60 years and have reached the end of their useful life, absent significant upgrade or retrofit investments.

With declines in mining productivity, average minemouth coal prices increase

Figure MT-60. Average annual minemouth coal prices by region in the Reference case, 1990–2040 (2015 dollars per million Btu)



Source: 2016 EIA Annual Energy Outlook at MT-31

The national trend away from coal fired generation, and production declines in the Appalachian coal mining industry over the long-term, suggest that the broader socio-economic challenge for coal producing states is to prepare for a future that is less dependent upon coal—irrespective of the impact of more stringent environmental regulations. And while coal mining will continue to be an important part of West Virginia's economy for the foreseeable future, the state must look for additional drivers of economic development to mitigate the impacts of the decades-long decline in the coal industry.

The Need for Carbon Regulation

Climate change, largely attributable to increasing concentrations of GHGs in the atmosphere, is the most serious threat facing the planet. The National Climate Assessment, for example, presents compelling evidence of long-term climate trends, and the likely future for the remainder of the 21st century, if we fail to take action to reduce GHG emissions. Within the state of West Virginia, we are already seeing the impacts of climate change, as evidenced by the historic flooding experienced this past summer. The part of the United States that includes West Virginia has seen a 71 percent increase in extreme precipitation since 1958, according to the National

Climate Assessment.⁶ According to the Charleston Gazette-Mail, “[s]everal national climate experts said the severity of the Mountain State devastation during the recent flood was almost certainly worsened by human-caused global warming.”⁷ In my view, doing nothing to address this urgent problem is not an option.

Nor is there any question that the EPA has the legal authority to regulate GHGs as a pollutant under the Clean Air Act, following the decision of the U.S. Supreme Court in *Massachusetts v. EPA* (2007) and the subsequent endangerment finding by the EPA in December 2009. The EPA moved beyond its endangerment finding to adopt the Clean Power Plan in August 2015, using its authority under Section 111(b) of the Clean Air Act to regulate GHGs from new power plants and under 111(d) for existing power plants. The current litigation regarding the legality of the Clean Power Plan, which consumed six hours of oral argument last Tuesday in the D.C. Circuit Court of Appeals, will likely resolve most of the legal issues regarding the validity of this particular incarnation of carbon regulation.

But even if the Clean Power Plan is ultimately struck down, the guidance provided by the court decision will result in a “new and improved” form of carbon regulation. Making the Clean Power Plan go away does not make climate change go away. Nor would it strip away the U.S. commitment under the Paris Agreement to reduce its GHG emissions by 26-28 percent below the 2005 level in 2025, and to make “best efforts” to reduce emissions by 28 percent. (That would include curbs on carbon dioxide, methane, nitrous oxide, perfluorocarbons, sulfur hexafluoride and nitrogen trifluoride, all of which contribute to global warming.) With India ratifying its participation in the Paris Agreement last Sunday (October 2), 62 countries representing about 52 percent of global GHG emissions are now on board, making it virtually certain that the level of participation will reach the levels necessary to make the Paris Agreement binding on its signatories.

Impact of the Clean Power Plan on West Virginia

The Clean Power Plan is designed to produce a 32 percent reduction of CO₂ pollution from power plants in the U.S. by 2030, as compared with 2005 levels. It sets state-specific emission limits in the form of an emission rate—pounds of carbon dioxide per megawatt-hour of net electricity produced. The final rule also translates rate-based limits into mass-based limits (total CO₂ emissions in tons). West Virginia’s Clean Power Plan obligations require emissions reductions from a rate of 2,064 pounds per megawatt-hour in 2012 to 1,305 pounds per megawatt-hour in 2030. Under a mass-based standard, West Virginia would be required to reduce carbon dioxide emissions from 72,319 thousand short tons in 2012 to 51,325 thousand short tons by 2030 if only existing sources are considered or 51,857 thousand short tons if both existing and new sources are considered.

⁶ Doyle Rice, *Why the W.Va. Floods Were So Deadly and Destructive*, USA TODAY, June 27, 2016, available at <http://www.usatoday.com/story/weather/2016/06/27/west-virginia-floods-storm-train/86429020/>

⁷ *Gazette Editorial: Floods Part of Climate Change in WV*, July 24, 2016, available at <http://www.wvgazette.com/gazette-editorials/20160715/gazette-editorial-floods-part-of-climate-change-in-wv>

The targets would seem to represent a significant challenge for West Virginia: the rate-based target requires a 37 percent reduction in carbon dioxide emissions per megawatt-hour, while the mass-based approach requires a 29 percent reduction in total emissions from existing sources. In the months following EPA adoption of the Clean Power Plan in August 2015, considerable analyses were undertaken to evaluate the ability of West Virginia to meet the required carbon emissions reductions.

DEP Feasibility Study Emissions Trading Modeling

One such analysis was presented by the West Virginia Department of Environmental Protection (DEP) pursuant to a legislative mandate enacted during the 2015 legislative session. House Bill (HB) 2004, codified at West Virginia Code § 22-5-20, included a number of provisions associated with Clean Power Plan implementation in West Virginia. Among other things, HB 2004 directed the West Virginia DEP to prepare a feasibility study regarding the state's ability to comply with the Clean Power Plan, and to submit this study to the Legislature no later than 180 days following finalization of the federal rule. In compliance with HB 2004, the West Virginia DEP submitted its Feasibility Study to the Legislature on April 20, 2016.⁸

The modeling performed in connection with the DEP Feasibility Study showed that using a mass-based compliance approach coupled with national emissions trading would be the “least impactful” for West Virginia, followed by a rate-based approach with national trading. Importantly, the DEP Feasibility Report concludes that “*compliance with the 111(d) rule is feasible from an economic standpoint under either of these scenarios.*”⁹

Modeling of Emissions Trading Programs

Other analyses have confirmed that the availability of multi-state emissions trading—either regionally or nationally—produces relatively low compliance costs for West Virginia. Preliminary modeling by PJM, for example, shows that regional emissions trading allows coal-dominant states to lower their costs of buying allowances and thereby preserve the useful life of existing assets.¹⁰ The PJM analysis shows that although West Virginia's average annual CO₂ emissions would substantially exceed its state mass-based cap during the 2022-2037 period, the availability of relatively low-cost allowances would allow West Virginia's coal plants to continue operating, with the “excess” emissions covered through the purchase of emissions allowances from surrounding PJM states with excess allowances due to a lower-carbon profile.

Analyses performed for the Natural Resources Defense Council (NRDC) by M.J. Bradley & Associates also show that emissions trading on a national scale will result in relatively low

⁸ West Virginia DEP, Feasibility Report for a State Plan under EPA's Clean Air Act Section 111(d) Rule Regulating Carbon Dioxide Emissions from Existing Fossil Fuel-Fired Electric Generating Units (Apr. 20, 2016), available at <http://www.dep.wv.gov/pio/Pages/Clean-Power-Plan.aspx> [hereinafter “DEP FEASIBILITY STUDY”]

⁹ *Id.* at 6 (emphasis added).

¹⁰ PJM Clean Power Plan Modeling Preliminary Phase 1 Long-Term Economic Compliance Analysis Results (May 6, 2016).

allowance prices.¹¹ In fact, under a national trading scenario, the allowance price would be zero through 2025 and would rise only to \$4.14 per ton in 2030 (assuming current levels of energy efficiency savings). Scaling up energy efficiency programs would lead to even lower allowance prices, to \$2.97 per ton. Importantly for West Virginia, the M.J. Bradley analysis for NRDC shows that national emissions trading, coupled with increased the level of energy efficiency, results in a reduction in the amount of coal plant retirements.

While it may seem counterintuitive that increasing investment in energy efficiency programs results in a lower level of coal plant retirements, supply and demand in the allowance market drive this result: increased energy efficiency savings result in a greater number of emissions allowances, thereby producing lower allowance costs, which results in lower compliance costs for existing coal plants to continue operating by covering their “excess” emissions with low-cost allowances. The compliance approach modeled by M.J. Bradley is similar to that modeled by PJM: West Virginia’s coal-fired power plants would comply by purchasing allowances from other states.

Findings of the Center’s Report

The final report performed by the Center jointly with Downstream Strategies, as noted above, modeled two scenarios showing how West Virginia could achieve compliance with the Clean Power Plan:

- **Existing Sources.** This scenario demonstrates how West Virginia could achieve compliance with mass-based compliance targets applied to existing sources only. West Virginia would maintain its role as a major electricity exporter through the use of a mix of generation and demand-side resources. This scenario illustrates how high levels of coal-fired generation can be combined with new natural gas combined cycle plants, modest levels of natural gas co-firing at two coal-fired power plants, and modest levels of new renewable energy and demand-side energy efficiency. This scenario does not address the issue of leakage.¹²
- **Existing Plus New Sources.** This scenario demonstrates how West Virginia could achieve compliance with mass-based compliance targets applied to existing and new sources, thereby directly addressing the issue of leakage. Compared with the Existing Sources Scenario, this scenario includes additional natural gas combined cycle capacity starting in 2030 and additional renewable energy and demand-side energy efficiency starting in 2018. In addition, it includes heat rate improvements at West Virginia’s coal-fired power plants. Even with this greater diversification of electricity generation

¹¹ M.J. Bradley & Associates. 2016. EPA’s Clean Power Plan, Summary of IPM Modeling Results with ITC/PTC Extension (June 10, 2016).

¹² As part of compliance with the Clean Power Plan, the EPA requires mass-based state plans to address the issue of “emissions leakage,” which results from the incentives under a mass-based plan to shift generation and emissions to new fossil-fired power plants outside the program.) Because nearly 1,900 megawatts of new natural gas combined cycle units are expected to come online in West Virginia before 2021, addressing leakage presents a challenge for West Virginia plan compliance. West Virginia can address the leakage issue by including these new plants under Section 111(d) and using the New Source Complement under the Clean Power Plan, which provides a slightly higher mass-based target to accommodate emissions from new sources.

sources, coal-fired generation would remain the main source of electricity generation in West Virginia. But by incorporating many other energy resources, West Virginia could actually generate new jobs, tax revenues, and environmental benefits of developing new energy resources, while maintaining its position as a major electricity exporter.

The table below shows the assumptions included in each of the two scenarios. Both involve modest increases in energy efficiency (i.e., utility programs to encourage customers to conserve energy and/or make investments in energy efficiency measures) and renewable energy resources (wind and solar), as well as some co-firing of natural gas at existing coal plants. The scenarios also reflect the projected addition of new natural gas-fired generation in West Virginia. While no natural gas-fired power plants currently operate in West Virginia, a combined-cycle combustion turbine is now being built in Moundsville, and is expected to bring 595 MW of high-efficiency capacity into service in 2018. Moreover, during the past year, Energy Solutions Consortium, LLC, a New York-based company, announced plans to build two additional natural gas-fired plants in West Virginia: a 750-MW plant in Brooke County at Follansbee, fueled with natural gas produced in the Utica Shale, and a 550-MW plant in Harrison County at Clarksbur that will take advantage of the output of the Marcellus Shale. Both plants have an expected in-service date of June 1, 2020.

Measure	Existing Sources	Existing Plus New Sources
Improve heat rates at coal-fired power plants	N/A	3% improvement
Increase non-hydropower renewables	2.8% of total generation by 2030	4.4% of total generation by 2030
Improve end-use energy efficiency	Cumulative savings of 5% by 2030	Cumulative savings of 15% by 2030
Hydropower	2.0% of total generation by 2030	2.4% of total generation by 2030
New natural gas combined cycle plants	595 MW in 2018; additional 1,235 MW in 2020	595 MW in 2018; additional 1,235 MW in 2020; additional 245 in 2030
Natural gas co-firing	15% co-firing at two plants—one in 2020 and the other in 2022	15% co-firing at two plants—one in 2020 and the other in 2022
Electricity exports	2012 exports continue through 2030	2012 exports continue through 2030

Low Compliance Costs—But Is That All?

As described in the preceding section, the Clean Power Plan presents some challenges for West Virginia, but *achieving the required CO₂ emissions reductions is eminently achievable*. That seems to be the consensus of the DEP Feasibility Study, the modeling performed by PJM and M.J. Bradley, as well as the report prepared by the Center and Downstream Strategies. But that is not—and should not be—the end of the discussion. *Are there actions that West Virginia policymakers should be taking to put the state in the position to take advantage of the economic opportunities that will be created by nationwide implementation of the Clean Power Plan?* The

answer is clearly “YES!” That is the focus of the “Policy Recommendations” section of the Center’s July 2016 final report. As will be discussed below, West Virginia policymakers in recent years generally *have moved in the wrong direction* to position the state for compliance with the Clean Power Plan and, more broadly, for the state to participate in the clean energy transformation that is underway nationally, whether we like it or not.

- Rather than provide the West Virginia DEP with all the available tools to fashion a compliance strategy for West Virginia under the Clean Power Plan that will work for West Virginia and will take advantage of the flexibility afforded by the Clean Power Plan, the legislature passed a law in 2015 that severely limits DEP’s tools for developing a compliance strategy and creates a situation virtually guaranteeing the imposition of a Federal Implementation Plan by the EPA using its authority under the Clean Air Act.
- Rather than requiring electric utilities in the state to engage in a meaningful long-term planning process that is geared toward keeping rates low for utility customers and taking advantage of all the resource options at the utility’s disposal—including energy efficiency—West Virginia law fails to require utilities to treat energy efficiency as a “resource” and to plan with an eye toward keeping rates reasonable.
- Rather than requiring utilities to offer meaningful energy efficiency programs for their customers—and thereby give customers the tools necessary to manage their energy costs—the electric utilities operating in West Virginia are allowed to offer token energy efficiency programs that place the Mountain State near the bottom of all the states in the U.S. with respect to energy efficiency offerings.
- Rather than encouraging the development of renewable resources within West Virginia, the legislature as one of its first actions of the 2015 legislative session repealed the Alternative and Renewable Energy Portfolio Standard, leaving West Virginia without any measures that stimulate the development of renewable resources in the state.
- Rather than encouraging the development of distributed energy resources in West Virginia, and thus allowing West Virginians to participate in the new energy economy created by rapid expansion of distributed solar resources throughout the United States, the legislature in 2015 passed a law directing the West Virginia Public Service Commission (PSC) to ensure that no “cross-subsidization” arises from the state’s existing net metering policies. The effect of this law was to create a cloud of uncertainty over what could be a vibrant market for utility customers in West Virginia seeking resources to generate their own electricity and help manage their energy costs. Moreover, West Virginia remains one of the few states in the country that does not allow power purchase agreements or lease arrangements for utility customers seeking to install solar PV panels.

It's time to take decisive action to position West Virginians to be players in this new, clean energy economy. Compliance with the Clean Power Plan regionally and nationally is going to stimulate tremendous economic opportunities, as states compete to generate the zero- and low-carbon resources (e.g., renewable and low-carbon energy sources and expanded energy efficiency programs) that carbon emitters will need in order to achieve compliance with the Clean Power Plan. In other words, West Virginia has an opportunity to generate the “currency” that will be used in the clean energy markets of the future. As described in the DEP Feasibility Study:

“As part of the system for effecting this change, the EPA rule establishes a form of ‘currency’ which electric generating units must acquire in order to comply. For states that choose to adopt a mass-based plan, the units of this currency are called allowances. For states that adopt a rate-based plan, the units are called emission rate credits (ERCs). In either system, a generating unit must possess enough currency at the end of the compliance period to enable it to meet the limit for that period. A state plan may allow trading of this currency on an in-state-only, a multistate or a national basis. Generally, the wider the market for trading is, the lower the per-unit cost of the currency is anticipated to be. The mass and rate-based markets are structured differently, but both are intended to encourage movement away from high carbon sources of electricity to lower emitting sources.”¹³

The pathway for compliance with the Clean Power Plan in West Virginia will be a much easier one if West Virginia policymakers start implementing the measures that will produce the “currency” of the energy markets of the future, and thereby enable the state to take advantage of the economic opportunities created by the Clean Power Plan. The recommended actions are fairly straightforward, as discussed in the next section.

Recommended Policies to Increase Economic Opportunities for West Virginians

- Remove legislative restrictions on state plan development

As noted above, West Virginia enacted HB 2004 in 2015, codified at W.Va. Code § 22-5-20. This legislation would severely limit restrict the ability of the West Virginia DEP to take advantage of the flexibility afforded under the Clean Power Plan to develop a compliance strategy that works for West Virginia. A strict interpretation of HB 2004 suggests that DEP could be limited to developing performance standards based solely on the emission reduction potential of heat rate improvements at individual power plants. In its Feasibility Study, DEP took the position that the effect of certain provisions in W.Va. Code §§ 22-5-20-(e) and (f) would limit the compliance approaches that DEP may wish to use in developing a state plan. Specifically, DEP interpreted the statute to allow consideration of only “inside the fence” measures (i.e., modification

¹³ DEP FEASIBILITY STUDY at 26.

of individual generating units to improve their performance) and to preclude the trading of ERCs or allowances. The DEP Feasibility Study recommended that state law be changed to expressly permit a mass-based plan with trading as a means of compliance.¹⁴ Removing the limitations imposed in W.Va. Code § 22-5-20 is essential to afford DEP with maximum flexibility to choose among the various compliance options available under the Clean Power Plan when developing a state plan for West Virginia. The preferred path identified by DEP in its Feasibility Study, as discussed above, relies on the availability of trading ERCs or allowances as the least disruptive compliance strategy for West Virginia.

- Issue revised integrated resource planning requirements for electric utilities

Integrated resource plans (IRPs) evaluate a full range of supply- and demand-side resource alternatives for meeting projected electric power demand in order to provide adequate and reliable service to customers at the lowest system cost. This range of alternatives includes, among other things, new generating capacity, power purchases, energy conservation and efficiency, combined heat and power (CHP), district heating and cooling applications, and renewable energy resources.

The “integrated” aspect of IRPs ensures that a utility considers demand-side (e.g., conservation and energy efficiency) and other customer-sited resources (e.g., solar PV and cogeneration) on the same footing as the addition of traditional supply-side resources (large, utility-owned generating plants) when it evaluates options for meeting future system needs. West Virginia adopted legislation in 2014 requiring the state’s utilities to engage in integrated resource planning. The PSC issued an order in March 2015 requiring West Virginia utilities to submit IRPs by January 1, 2016 and at least every five years after that date. There is nothing in the 2014 legislation or in the PSC order, however, that requires *integration* of supply-side and demand-side resources in the development of IRPs.

FirstEnergy’s 2015 IRP, for example, fails to integrate energy efficiency as a resource, and in fact concludes that “[p]rograms to reduce demand cannot consistently and reliably fulfill the long term need for supply side resources,”¹⁵ an analysis—or lack thereof—that utterly fails to fulfill the “integrated” requirement of integrated resource planning. FirstEnergy continues to pursue its path of meager energy efficiency savings—0.1 percent per year through 2018—notwithstanding the compelling evidence that energy efficiency is the most cost-effective tool for addressing utility resource needs as well as reducing GHG emissions. In sharp contrast, the Appalachian Power IRP treats energy efficiency as a “stand-alone resource” to be incorporated in an optimum resource portfolio, and it similarly integrates wind and solar resources as economically justifiable supply-side acquisitions.¹⁶

¹⁴ *Id.* at 9.

¹⁵ 2015 Integrated Resource Plan, Monongahela Power Company and The Potomac Edison Company, Dec 30, 2015 [hereinafter “FIRSTENERGY IRP”], p. 56.

¹⁶ Appalachian Power, Integrated Resource Plan to the Public Service Commission of West Virginia, Jan. 1, 2016., p. ES-5.

In addition to its rejection of energy efficiency as a resource and its dismissal of renewable resources as “expensive” and “intermittent,” FirstEnergy’s 2015 IRP lays the groundwork, without any supporting quantitative analysis, for the possible purchase of the Pleasants Power Station—a 1,300-MW coal-fired generating station constructed in the late 1970s and currently owned by its unregulated subsidiary, FirstEnergy Solutions. FirstEnergy’s regulated subsidiaries in West Virginia, MonPower and Potomac Edison, would purchase this plant. It is difficult to explain from the ratepayers’ perspective how acquisition of another coal-fired generating unit makes sense as a long-term resource strategy, given the carbon constraints imposed under the Clean Power Plan. The acquisition, apart from being completely contrary to the trend of other utilities in the U.S. to divest themselves of coal-fired generation, would result in capacity and energy additions that seem to be far in excess of the needs of the MonPower and Potomac Edison ratepayers. As in the case of FirstEnergy’s successful sale of 80 percent of its Harrison Power Station from its unregulated subsidiary to MonPower in 2013, FirstEnergy will likely contend that any excess capacity can be sold in the wholesale energy markets, thereby resulting in benefits for its regulated customers from acquisition of this “low cost producer” from FirstEnergy Solutions. At \$57 per MWh,¹⁷ however, this resource will likely not be “in the money” in the competitive PJM energy markets, and West Virginia ratepayers may be saddled with another non-competitive coal plant that, like the Harrison acquisition, contributes to upward rate pressures as the forecasted wholesale revenues fail to materialize.¹⁸ The harsh realities of the competitive wholesale marketplace in PJM can only be expected to worsen for coal plants in the medium-term, given the anticipated addition of nearly 1,900 MW of highly efficient natural gas-fired plants in West Virginia over the next five years.

A robust IRP requirement would ensure that energy efficiency, renewables, natural gas, coal, and other resources are evaluated on equal footing so that West Virginia consumers receive the benefit of a reliable energy system at the lowest system cost over the long term. Well-designed IRP rules would also provide a transparent framework for evaluating and securing the lowest-cost compliance options under the Clean Power Plan.

- Adopt an Energy Efficiency Resource Standard

Energy efficiency programs offer consumers the tools to take control of their energy bills through appliance, equipment, heating, air conditioning, lighting, weatherization, and other upgrades that result in the use of less energy while still receiving the same level of energy service. Twenty-six states (including neighbors Ohio, Maryland, Pennsylvania, and Virginia) have energy efficiency mandates (either by legislation or regulatory order) that require utilities or state agencies to develop programs that help their customers implement end use energy efficiency improvements. The mandates are often referred to as EERSs. Some states require utilities to meet annual energy

¹⁷ FIRSTENERGY IRP, Figure 16 at 53.

¹⁸ A report recently issued by the Institute for Energy Economics and Financial Analysis found that Mon Power customers have borne \$164 million in additional costs attributable to the Harrison acquisition. Cathy Kunkel, *Re-Regulating Coal Plants in West Virginia: A Boon to FirstEnergy, a Burden to Ratepayers*, Sep. 2016, available at http://ieefa.org/wp-content/uploads/2016/09/Re-regulating-Coal-Plants-in-West-Virginia_September-2016.pdf

efficiency savings targets, while others require utilities to spend a specified percentage of total retail sales on energy efficiency programs. Even though energy efficiency programs vary by state, they all bring energy savings benefits to consumers.

Unfortunately, utility customers in West Virginia do not have the same opportunity to access energy efficiency programs that customers of those same utilities have in neighboring states. As a result, West Virginia residents pay higher electricity bills than residents in most states and will likely see even higher bills as utilities continue to seek annual rate increases under the power cost recovery mechanism currently in place in West Virginia. In its recent ranking of states with respect to the effectiveness of their energy efficiency programs, the American Council for an Energy Efficient Economy (ACEEE) ranked West Virginia No. 44 out of the 51 states evaluated (including the District of Columbia).¹⁹ West Virginia received a total of 8 points out of the 50 points possible in the ranking system and, remarkably, on the metric of utility program offerings, West Virginia received a *minus 0.5* score out of the 20 points possible.²⁰ According to the ACEEE report, although electric utilities in West Virginia implement efficiency programs, they “achieve low levels of savings,” and “the state has not enacted any adjustments to the utility business model to incent utilities to include energy efficiency as part of resource planning.”²¹

The adoption of an EERS in West Virginia would provide tangible economic benefits to residents and business and a low-cost emission reduction measure under the Clean Power Plan. West Virginia utility customers should have the same opportunity to access energy efficiency savings as utility customers in neighboring states. Ohio and Pennsylvania require AEP and FirstEnergy affiliates to meet energy efficiency goals, and in Kentucky, customers are benefiting from energy efficiency upgrades through the How\$martKY program. How\$martKY employs one of the many customer-based financing mechanisms—on-bill financing—to allow customers to pay for the customer portion of energy efficiency retrofits over time with the savings generated from the retrofits. West Virginia should adopt an EERS that requires the state’s utilities meet an energy efficiency goal of at least 15 percent by 2030 and that sets goals for achieving a percentage of the cumulative 2030 target at five-year intervals.

- Adopt a Renewable Energy Portfolio Standard

Renewable energy is a rapidly growing component of the U.S. economy and provided the largest portion of new capacity additions and total electric generation in the U.S. in 2014. Renewable energy, including wind, solar, and hydropower, has strong potential for future growth in West Virginia. Twenty-nine states, including Maryland, Ohio, and Pennsylvania, have adopted renewable energy standards to incentivize the development of renewable energy resources in their state and to capitalize on the energy and economic benefits of including these resources as part of

¹⁹ ACEEE, The 2016 State Energy Efficiency Scorecard, available at <http://aceee.org/state-policy/scorecard>.

²⁰ ACEEE, The 2016 State Energy Efficiency Scorecard, West Virginia, available at <http://database.aceee.org/state/west-virginia>

²¹ ACEEE, The 2016 State Energy Efficiency Scorecard, West Virginia Fact Sheet, available at <http://aceee.org/sites/default/files/pdf/state-sheet/2016/west-virginia.pdf>

a diverse energy portfolio. West Virginia should adopt an RPS that includes binding targets for the development of new renewable energy resources such as wind, solar, and hydropower.

West Virginia enacted its AREPS in 2010, but that law was repealed in 2015. The AREPS required utilities to meet increasing percentages of their electricity supply through either “alternative” or “renewable” energy sources. The AREPS legislation was structured, however, so that utilities could meet the portfolio standard entirely with “alternative” resources—which included burning natural gas, tires, and coal—thereby creating no additional incentive for the development of renewable energy in West Virginia.

The Legislature could adopt a new RPS that requires a percentage of or retail or total electric generation be met with electricity generated from renewable energy sources. The RPS could set a target date of 2030 and provide interim target dates by which increasingly greater portions of the final target must be achieved. An RPS should also incorporate a carve-out requiring a percentage of the renewable energy standards be met with solar energy. Many states throughout the U.S. are moving to integrate more solar PV to take advantage of this increasingly cost-competitive distributed energy resource that brings diversification to a utility’s power supply portfolio and provides customers another tool by which to control their energy costs. Incentives such as an RPS with a solar carve-out would have a positive impact on renewable investment decisions, and would stimulate production of valuable zero-carbon “currency.”

- Adopt policies that encourage investment in clean distributed generation resources

DG resources are generating facilities (typically not more than 20 MW) that are interconnected to a local distribution system. DG resources include CHP, solar PV, anaerobic digestion, fuel cells, and other small-scale generation resources. These resources are typically owned by customers, not distribution utilities, and are sited at or very close to a customer’s home or business. Investment in DG, particularly solar PV, has increased dramatically in recent years as equipment and installation costs have declined significantly. State policies that facilitate interconnection and net metering, remove discriminatory utility tariffs, and facilitate alternative financing structures that provide customers different financing options are important factors in creating a market structure in which the benefits of DG resources can be realized by consumers, utilities, and grid operators.

West Virginia currently has interconnection and net metering policies in place that facilitate the development of DG resources by providing utility customers with certainty as to utility interconnection practices and the revenue they will receive for electricity produced through customer-sited generation. In 2015, however, the Legislature enacted HB 2201, which requires the PSC to ensure that net metering rates do not result in “cross-subsidization” of customer generators by customers who do not generate their own power. The enactment of HB 2201 creates uncertainty and casts some doubt on the prices that utilities will be required to pay for customer-generated power, given HB 2201’s prohibition on “cross-subsidization,” the complexities of the rate-setting process, and the poor track record of West Virginia utilities with respect to integration of DG resources. Rather than enhancing the ability of individual West Virginians to take control over

their energy costs by generating their own electricity, HB 2201 does precisely the opposite—it creates uncertainty and increases the risks associated with investment in DG resources.

In May 2015, the PSC appointed a net metering task force to undertake a review of net metering policies, as required by HB 2201. That task force met for several months thereafter, and PSC staff filed its final report with the PSC in September 2015, recommending generally that “cross-subsidization” be defined narrowly to include only costs “directly incurred” by the utility to accommodate net metering customers—a recommendation that would largely leave the existing net metering provisions in place.²² Although most members of the net metering task force expressed support for the Staff position, both FirstEnergy and AEP dissented from those recommendations and urged the PSC to adopt a different approach for net metering customers that would impose additional charges (i.e., standby charges) and/or eliminate the utilities’ obligation to purchase customer-generated energy at retail rates. One year later, the PSC has yet to act on the recommendations of the net metering task force, and the future of net metering in West Virginia remains uncertain.

Moreover, West Virginia remains one of the few states in the country that does not allow power purchase agreements (PPAs) or lease arrangements for utility customers seeking to install solar PV panels. As a result, customers seeking to install solar panels must bear the full up-front capital costs, rather than have the option available in most other states to contract with a solar developer to lease panels or enter into a PPA that will make distributed solar more feasible for the average homeowner or business.

Impact of EPA Regulations on Air Quality

While not directly related to carbon regulation under the Clean Power Plan, the EPA has also taken action to make the ozone standard more stringent. Relevant to this testimony, West Virginia apparently has achieved compliance with this stronger standard. On October 1, 2015, the EPA revised the primary and secondary ozone National Ambient Air Quality Standard (NAAQS) under the Clean Air Act, strengthening both the standards from 75 parts per billion (ppb) to 70 ppb. (Primary standards are health-based to protect people; secondary standards provide protection against decreased visibility and damage to animals, crops, vegetation and buildings.) The West Virginia DEP announced on Friday that it has recommended to the EPA that the entire state of West Virginia be designated as being in attainment with the new ozone NAAQS. The recommendation is based upon quality assured data submitted by the DEP’s Division of Air Quality (DAQ) from its EPA-approved statewide monitoring network. If EPA doesn’t modify the state’s recommended designation, it becomes effective Oct. 1, 2017. In commenting on DEP’s recommendations to the EPA, DEP Cabinet Secretary Randy C. Huffman stated that “the fact that our ozone design values have continued to decrease and we are meeting EPA’s most stringent

²² West Virginia PSC, Case No. 15-0682-E-GI.

ozone standard yet is a great testament to the success of our state and regional air pollution control programs.”²³

Conclusion

There is no question that the coal mining communities of southern West Virginia are bearing the brunt of the nation’s transition to a clean energy economy. This transition is driven by a number of factors, only one of which is the role of regulations adopted by EPA under the Clean Air Act, such as the Mercury and Air Toxics Standard (MATS) and the Clean Power Plan. Other drivers include the overall de-carbonization of the nation’s electricity supply due to the availability of relatively cheap and plentiful natural gas and dramatic declines in the cost of renewable energy resources, as well as the cost disadvantage of Central Appalachian coal due to the decreasing productivity of coal mines in the region. With respect to the impact of the Clean Power Plan in West Virginia in particular, a number of independent analyses have concluded that the Mountain State can achieve compliance with the required reductions in GHG emissions without significant repercussions to West Virginia’s economy. Given the dire economic circumstances currently prevailing in southern West Virginia and the fiscal impacts that flow through to state and local governments as coal production continues to decline, however, *any* adverse impact should be avoided.

These adverse impacts can be mitigated, however, by acting promptly to position the state to take advantage of the economic opportunities that will be stimulated by regional and national efforts to comply with the Clean Power Plan. In the words of Albert Einstein, “in the middle of every difficulty lies opportunity.” These compliance strategies are going to stimulate tremendous economic activity, as states compete to generate the “currency” of the energy markets of the future, in the form of zero- and low-carbon resources (e.g., renewable and low-carbon energy sources and expanded energy efficiency programs). With an “all-of-the-above” energy strategy, West Virginia can be a successful participant in these carbon markets, and tap into the resulting job creation and economic benefits that will be generated over the coming decades. The pathway for compliance with the Clean Power Plan in West Virginia will be a much easier one if West Virginia policymakers start implementing the measures that will produce the “currency” of the energy markets of the future, and thereby enable the state to take advantage of the economic opportunities created by the Clean Power Plan.

²³ West Virginia DEP, *Data Shows West Virginia Complies with New Ozone Standard*, Sep. 30, 2016, available at <http://www.dep.wv.gov/news/Pages/Data-Shows-West-Virginia-Complies-with-New-Ozone-Standard.aspx>

1 I will take my five minutes and ask questions, and then
2 we'll just kind of rotate around. So anyway, I want to
3 thank all of you. Very good.

4 Mr. Trisko, you know, one thing that I've
5 wondered about and in your testimony you mentioned that
6 if West Virginia participated in an international -- or
7 an interstate trading program to meet the demands of the
8 Clean Power Plan, that we would be subsidizing -- and
9 Mr. Van Nostrand mentioned this too -- subsidizing other
10 types of energy in other types of state. So just in
11 terms of a -- in terms of meeting the Clean Power Plan
12 through trading, I've always thought if we've got 96
13 percent coal-fired generation, who's going to want to
14 trade with us? Because what do we really have to offer
15 as a state? And I just feel like it disadvantages us
16 even more.

17 So could you talk a little bit about that
18 for me.

19 MR. TRISKO: Senator, one of the compliance
20 options that is available under the Clean Power Plan is
21 participation in an interstate trading program, either
22 on a tonnage mass basis or an emission rate basis. And
23 the PJM study found generally that the least cost
24 approach for most of the states it evaluated was the

1 interstate rate approach.

2 Now, in effect what that requires is the
3 purchase of emission allowances for states that are coal
4 heavy like West Virginia. The purchase of emission
5 allowances from carbon-free generators such as wind and
6 solar.

7 SENATOR CAPITO: Right.

8 MR. TRISKO: Now, the economics of wind and
9 solar industry are complex and it depends upon whether
10 you're talking about residential solar rooftop kinds of
11 applications, utility scale solar which is a different
12 and more economic option in the long run, but bottom
13 line is that the renewable energy resources are most
14 cost effective where the renewable energy is located.

15 And that is, for example, why Iowa is the
16 wind capital of the Midwest because it has tremendous
17 wind resources and will continue to develop those
18 resources. They've been selling emission reduction
19 credits to other states subject to renewable portfolio
20 standards for many years, and they will continue to do
21 so under the Clean Power Plan.

22 If you want to develop large scale solar
23 applications -- and it's really only the large scale
24 ones that are economically competitive -- you go to

1 where the sun shines with the greatest intensity
2 watts -- kilowatt hour per square meter of land, and
3 that's not in West Virginia. It's in Arizona. It's in
4 New Mexico. It's in California. It's in the sunbelt;
5 it's not here.

6 So, you know, while there may be some
7 applications for rooftop solar and the like in West
8 Virginia, sure -- that doesn't even dent the State's
9 requirements-- reduction requirements under the Clean
10 Power Plan.

11 SENATOR CAPITO: So let me just follow up on
12 here because I'm going to kind of keep it under my five
13 minutes in the questioning. So basically if you're
14 buying -- if West Virginia would have to buy credits
15 which we would have to do, those credits are -- come at
16 the expense of the state, of the rate payer, and our
17 electricity would go up. I mean, is -- that would be
18 the result of --

19 MR. TRISKO: Correct. The dollars would
20 leave the State of West Virginia --

21 SENATOR CAPITO: Right.

22 MR. TRISKO: -- and this was -- this was a
23 mainstay of the state and non-state petitioners'
24 arguments last week before the Court of Appeals that

1 this rule requires generation shifting in a way that in
2 effect requires utilities in states such as West
3 Virginia to open their checkbook -- which is their rate
4 payers' money -- and subsidize development of new -- and
5 it has to be new -- renewable energy development in
6 other states.

7 SENATOR CAPITO: Thank you.
8 Mr. Copley, thank you for your testimony and
9 I'm not sure that anything can be added, but I know
10 you're a proud coal miner and we're proud of you.
11 There's been a lot of talk about young people leaving
12 the state. What are you seeing here anecdotally in your
13 church, in your communities? Are people leaving? Are
14 they able to leave? Can they sell their homes? Can
15 they reposition themselves in other jobs? What -- for
16 the folks who are in positions like you, where are they
17 right now?

18 MR. COPLEY: We've had a lot of people from
19 our community that have either moved to another state or
20 moved away. We see it in our school systems. Mingo
21 Central High School was once four separate schools in
22 our county, but each of those coal mining counties
23 have -- or excuse me -- coal mining communities have
24 withered over the last several years.

1 And so you see young people who see jobs not
2 in our area but in other places and they see
3 hopelessness. There's nothing here. There's nothing
4 for us to stay here for. So when they leave school,
5 they leave the state --

6 SENATOR CAPITO: Right.

7 MR. COPLEY: -- or they go to other places
8 where economic opportunity is. And not just in energy,
9 just for economic diversity in general.

10 SENATOR CAPITO: Right. Thank you.

11 Senator Manchin.

12 SENATOR MANCHIN: First of all, again, thank
13 you. Thank all of you for being here. I think to
14 Mr. Van Nostrand, I would like to -- a few questions.
15 The first I want to say is on the energy portfolio that
16 was repealed in West Virginia had nothing to do with cap
17 and trade. There's not a single word of cap and trade
18 in that.

19 Basically, it said we could utilize coal in
20 a cleaner fashion and get credits. We're the only state
21 to say that. I think it was very short-sighted on what
22 was done there because we were moving to where
23 recognizing if coal was used with more technology, that
24 gave us the credits that we were needing and that makes

1 no sense to me.

2 MR. VON NOSTRAND: Senator, I've been
3 consistent on the point that cap and trade is the
4 complete misnomer as applied to that. But that was used
5 as the basis for repealing it. What it did have was
6 some measures in there that actually encouraged
7 renewable development because you did have greater
8 credits being allowed if it was renewable energy versus
9 alternative energy.

10 And what the legislature did by repealing it
11 was sending a signal -- we do not want to encourage
12 renewable energy in West Virginia. And that has been a
13 disservice in terms of positioning us for the new
14 clean --

15 SENATOR MANCHIN: Also in that piece of
16 legislation, it had net metering back which they found
17 out that was pretty popular and they were -- had to pull
18 back off of them. We could get into that all day long.

19 MR. VAN NOSTRAND: They passed another bill
20 that said that PSE needs to avoid cross-subsidization
21 and so there's a cloud over net metering because what's
22 the PSE going to do in cross-subsidization.

23 SENATOR MANCHIN: One thing I want to ask
24 you very quickly, sir. Do you think that the U.S. can

1 basically operate and provide the energy this country
2 needs to be a super power, if you will, and an economy
3 of \$19 trillion EDP in a fossil-free -- no fossil --
4 MR. VAN NOSTRAND: No.
5 SENATOR MANCHIN: -- anytime soon? So --
6 MR. VON NOSTRAND: No. I --
7 SENATOR MANCHIN: -- even though -- so I've
8 said this. I want you all to know. I'm not a denier.
9 I think the 7 billion people on the planet Earth have --
10 we have an impact. We have a responsibility. Now, we
11 can argue all day long how much of an impact humans
12 have, but there's no denying 7 billion people have had
13 an impact. Okay. I'm not a denier.
14 But when I have people saying that we can
15 run this country -- we can run the world without fossil,
16 they're worse deniers than the people that deny that
17 there's climate change. So until we can get people
18 looking for solutions to move forward, we're not going
19 to solve it. So you're saying that fossil has to be
20 used. Coal and gas and oil will be used.
21 MR. VAN NOSTRAND: Senator, I looked at the
22 same EIA data that you referred --
23 SENATOR MANCHIN: Right.
24 MR. VON NOSTRAND: -- to this morning. And

1 coal will continue to play a dominant role in the
2 nation's future, and I -- what I cited in my testimony
3 was even -- even without the Clean Power Plan, coal is
4 still --

5 SENATOR MANCHIN: Without tax -- without tax
6 credits, do you think renewables could survive and
7 basically fill what we're -- we're looking at -- EIA's
8 looking down the path at -- renewables are going to have
9 to jump up to 18, 20 percent.

10 MR. VAN NOSTRAND: Correct.

11 SENATOR MANCHIN: They're not out of single
12 digits yet. And we keep pouring more and more tax
13 credits to them, when you have coal and natural gas and
14 the things that are carrying the load right now, having
15 no -- very little research being done. That's what
16 we're talking about. We're trying to get some sort of a
17 balance.

18 We can carry the load, but we need some
19 investment for clean coal technology and how we have
20 more efficient combustibles.

21 MR. VON NOSTRAND: I think a lot of the
22 effort you make in the way of clean coal technology, I
23 think it's more about innovation. That's the way we
24 solve problems in America is we innovate and we solve

1 things and we invent things. So devoting the resources
2 to clean coal technology -- let's talk about burning the
3 stuff more cleanly and being able to capture the carbon.
4 That's the future. It's not necessarily defending that
5 we need to --

6 SENATOR MANCHIN: But if the credits -- but
7 if the credits right now is about 2, 2 and a half cents
8 per kilowatt hour --

9 MR. VON NOSTRAND: 2.5, yes, for wind.

10 SENATOR MANCHIN: -- for wind -- okay -- if
11 that went away and if the other countries don't adopt
12 the --

13 MR. VON NOSTRAND: The Paris agreement.

14 SENATOR MANCHIN: -- tax credits, are they
15 going to be able to fill in and basically bring
16 renewables onboard across the country -- across the
17 world if you will?

18 MR. VAN NOSTRAND: I think --

19 SENATOR MANCHIN: Would they adopt that?

20 MR. VON NOSTRAND: The solar credit is
21 substantial and -- but I've talked to people in the
22 solar industry. I don't think they think it's necessary
23 if solar prices are going down so rapidly that's it's
24 achieving grid parity. Wind out West -- they're

1 bringing wind projects online now for --

2 SENATOR MANCHIN: We've tried to take it
3 away and they won't let go of it. They keep every penny
4 they can keep.

5 MR. VAN NOSTRAND: Well, I don't think we
6 want to get in to all the embedded subsidies that are in
7 the tax code that favor the fossil fuel industry. We'd
8 have an interesting debate about that. It would last
9 for days.

10 SENATOR MANCHIN: So basically you do agree
11 that we cannot operate this country without fossil fuel.

12 MR. VAN NOSTRAND: I would never take that.

13 SENATOR MANCHIN: Okay. We've all got that.

14 MR. VON NOSTRAND: Yes.

15 SENATOR MANCHIN: So nobody's in denial
16 right now.

17 Bo, have you been able to have any job
18 offers since you've left? Have you had any
19 opportunities for jobs since you've left?

20 MR. COPLEY: No, sir. Not really.

21 SENATOR MANCHIN: No jobs at all. Nothing
22 substantial whatsoever --

23 MR. COPLEY: No.

24 SENATOR MANCHIN: -- with benefits or good

1 pay?

2 MR. COPLEY: No. Nothing that would ever
3 compare to --

4 SENATOR MANCHIN: Oh, I know the 84, but I'm
5 just saying --

6 MR. COPLEY: Yeah.

7 SENATOR MANCHIN: -- the average job --
8 30-\$40,000 in West Virginia, anything in that
9 neighborhood or above that that you've seen?

10 MR. COPLEY: No.

11 SENATOR MANCHIN: Okay. Bob, I don't need
12 to -- I know what's going on. I know how difficult it
13 is. And the bottom line is is that the severance tax --
14 there was a bill trying to reduce the severance taxes
15 they were already paying.

16 MR. PASLEY: Even further, even further.

17 SENATOR MANCHIN: Were you for that or
18 against it?

19 MR. PASLEY: Oh --

20 SENATOR MANCHIN: You'd be against that,
21 right?

22 MR. PASLEY: Much so, yes.

23 SENATOR MANCHIN: And it's not going to save
24 one coal job.

1 MR. PASLEY: No.

2 SENATOR MANCHIN: I've talked to coal people
3 and --

4 MR. PASLEY: It just benefits those -- it
5 benefits those that get the credits.

6 SENATOR MANCHIN: So we can't -- basically
7 it'd degradate our tax base that we have now -- what
8 little bit we have left.

9 MR. PASLEY: Yeah.

10 SENATOR MANCHIN: And Gene, I guess I would
11 just say to you is that what future do you see where
12 we're going to be at? I mean, we're hoping this -- the
13 Miners' Protection Act, without that, we throw every
14 health clinic in Southern West Virginia -- and most all
15 health clinics --

16 MR. TRISKO: Most.

17 SENATOR MANCHIN: -- in jeopardy of staying
18 open. I don't know if people know that or not. If we
19 don't get this passed, our clinics who basically support
20 the retired miners in the communities that have been hit
21 hardest are not going to be able to survive. Is that --

22 MR. TRISKO: Absolutely correct, Senator.
23 We support -- the UMWA funds support the medical
24 infrastructure in Southern West Virginia.

1 SENATOR MANCHIN: Yeah. All right. Thank
2 you.

3 SENATOR CAPITO: All right. Representative
4 Jenkins.

5 CONGRESSMAN JENKINS: Thank you, Madame
6 Chair. Couple of quick questions.

7 Ms. Ireland, I appreciate the sensitivity
8 and the concern you clearly expressed in the -- I think,
9 as you say, kind of this challenging balance of an area
10 that you see economic opportunity but fiscal
11 responsibilities in your governing capacity.

12 I took a look at your testimony. I don't
13 remember hearing it, but you referenced that the average
14 wage in the industry is 20 to \$24 an hour in the solar
15 industry. And I guess these are the installers. You
16 referenced a little bit higher for the what you call an
17 inside job. I guess these are the -- kind of the
18 management people in the office.

19 MS. IRELAND: Right.

20 CONGRESSMAN JENKINS: Okay.

21 MS. IRELAND: Sales, engineers.

22 CONGRESSMAN JENKINS: Well, I was struck by
23 your comment and you did use the words these folks can
24 make, quote, "a fair living." I want people to have a

1 good living. And we talked here a moment ago about the
2 average coal miner making well in excess of \$80,000 a
3 year. And I did some quick math. At the 20, 21, \$22 an
4 hour for these solar installers that you think we have
5 real opportunity for, I calculate that to be somewhere
6 in the low \$30,000-a-year jobs. Is my math wrong?

7 MS. IRELAND: I haven't done the math. I
8 mean, you multiple it by 2080 hours.

9 CONGRESSMAN JENKINS: Well, that's part of
10 the challenge. And, again, I recognize that you are
11 advancing the sense that we have of job opportunities in
12 the solar, but I think it's important that we point out
13 that that may be considered as a fair job. It's a
14 \$20-an-hour job. And should we be focused on trying to
15 grow \$20-an-hour jobs or \$89,000-a-year jobs in coal and
16 that's what I think we've giving up.

17 Mr. Van Nostrand, the -- I'm fascinated that
18 you're referencing and apparently adopting and accepting
19 some of the EIA numbers and the research of the impact
20 of the Clean Power Plan. You're nodding yes now. Part
21 of the research that's been done and all this talk about
22 climate change and saving our planet and the impact of
23 the adoption of the Clean Power Plan and what was argued
24 before the D.C. Circuit Court, as I understand the

1 research and studies suggest that the benefits -- the
2 benefits that are argued that full implementation of the
3 Clean Power Plan by 2100 -- you know, we're in 2016
4 now -- but full implementation of the Clean Power Plan
5 till the year 2100 -- at the end -- so we're talking 84
6 years from now with full implementation, the effects of
7 that will be to reduce temperatures by .018 degrees
8 centigrade, and the reduction in the sea level rise will
9 be -- I'm going to get it here -- the equivalent of
10 three pieces of paper.

11 So the economic devastation that we're going
12 to have over -- it's 2050 -- less than .3 millimeters.
13 So we're going to reduce the sea level rise by 2050 --
14 2050, 2-0-5-0 -- by .3 millimeters, and that's three
15 pieces of paper. And for the benefit of that we're
16 going to have a lot more Bo Copleys. We're going to
17 have a lot more bankrupt, challenging situations in our
18 counties. We're going to have retired coal miners who
19 are going to lose their pensions and widows.

20 Now, I want to ask you, Commissioner -- and
21 you're going to be mad at me for asking this question
22 because the good Senator on the end said cutting that
23 tax isn't going to save one job, and I want to come back
24 and ask you one more time. Do you think tax policies

1 and rates impact employment? I bet you do. I don't
2 know how anybody can think that taxes don't matter to
3 jobs.

4 MR. PASLEY: Well, they certainly do.
5 That's the whole picture -- the whole business world
6 picture.

7 CONGRESSMAN JENKINS: That's my
8 understanding, so -- but my -- so I just -- I think it's
9 a tough message. And I understand the unique
10 environment of our fiscal house, and I understand your
11 strong responsibility for the fiscal responsibility of
12 Wayne County. You've got a tough, tough situation. But
13 I want to come back to the taxes that employers pay
14 because I bet you're out there promoting tax breaks to
15 attract employers to come in to Wayne County. I know we
16 do to West Virginia.

17 MR. PASLEY: We do to a point, but we have
18 given the farm away. We need people to come in now and
19 set up businesses and hire people and put them to work.
20 This coal severance tax, as the Senator was alluding to,
21 was paid on extraction from minerals from our state, our
22 county. Why don't we get some of that back in our
23 county where it come from?

24 They have raped this state for years from

1 timber and coal and oil and gas. We should be sending
2 rebates back to our citizens like a lot of states do.
3 No one matches our state for natural resources.

4 CONGRESSMAN JENKINS: I agree.

5 MR. PASLEY: And so -- but where does the
6 money go? It's not landing in Wayne County, West
7 Virginia.

8 CONGRESSMAN JENKINS: Well, it's not landing
9 in Wayne County, West Virginia, because the payers are
10 those that -- Alpha, and those employers that aren't
11 there anymore. They're not there, and they're not
12 paying taxes as a result. And we're all paying -- we're
13 all hurting as a result. Wouldn't we like to have those
14 jobs back?

15 MR. PASLEY: Tell me how to do it. Any
16 cost. Let's get it done.

17 CONGRESSMAN JENKINS: That's what we're all
18 in this together. Absolutely. To get it done.

19 MR. PASLEY: But they are -- they have not
20 paid taxes that were due in '14 and '15. We've already
21 operated two years on that. And now they want us to go
22 back and lower those taxes. Below zero? We're not
23 going to send them a rebate check. So there is a --
24 they're good, corporate citizens.

1 CONGRESSMAN JENKINS: Yes.

2 MR. PASLEY: We were blessed with good,
3 corporate citizens, but they have a responsibility as a
4 corporation also to take care of what got them where
5 they are.

6 CONGRESSMAN JENKINS: I understand.
7 Absolutely. Thank you.

8 SENATOR CAPITO: I think we're going to do
9 another round if that's okay with everybody. I'm -- as
10 the Chair, I'm mandating that.

11 MR. VAN NOSTRAND: Senator, could I have a
12 chance to respond? I know Congressman Jenkins had a
13 long statement there, but didn't actually ask me a
14 question that would give me a chance to respond to what
15 he said.

16 CONGRESSMAN JENKINS: Absolutely.

17 SENATOR CAPITO: Yes, please.

18 MR. VAN NOSTRAND: Well, first you talked
19 about the economic devastation. I mean, I think most
20 would see this as huge economic opportunities that are
21 being created, and the question is are we going to
22 position ourselves to take advantage of those
23 opportunities.

24 Economic devastation -- I don't know how you

1 put a price on the calamities that are occurring around
2 the world as extreme weather events occur with more and
3 more frequency. And the damage that we saw in West
4 Virginia, at least some newspapers in this state have
5 attributed that to climate change and extreme weather
6 events caused by increase in concentrations of
7 greenhouse gases in the atmosphere.

8 Finally, you're talking about number three
9 on my list of the forces that are affecting West
10 Virginia. You chose to talk about climate change.
11 Let's talk about economics. You talk about economic
12 devastations. Climate change is not doing this to West
13 Virginia. It's economics. It's cheap natural gas.
14 It's cheap renewables. We can -- we can talk about
15 climate change and we can continue to debate about that,
16 but that is not the big driver of what's happening in
17 West Virginia.

18 SENATOR CAPITO: Thank you. I'd --

19 MS. IRELAND: Could I also respond -- I'm
20 sorry. He did ask me a question, and I wanted to answer
21 that more fully.

22 SENATOR CAPITO: Okay. Go.

23 MS. IRELAND: Congressman, you mentioned the
24 \$84,000-a-year jobs, and I understand that that's a good

1 living. But those jobs have been on the decline for a
2 long time, and the Clean Power Plan's not even been
3 enacted. So as a city official, yeah, I will take good
4 jobs that pay between 30 -- and if you look at the \$44
5 an hour -- \$80,000 a year and the support that goes
6 along with them -- marketing, legal, engineering, sales.
7 So that's my answer to that.

8 SENATOR CAPITO: Thank you. All right.

9 Now, I want to say something. We have
10 before us on the -- in a conference committee right now
11 an energy bill. It doesn't address much of what we've
12 talked about today, but it does address one of the
13 topics that's been brought up as a solution to some of
14 our issues in West Virginia. That's energy efficiency.
15 I think all three of us believe -- and, again, I'm
16 speaking for them but I'm pretty sure we all agree --
17 energy efficiency is a goal that we should all be trying
18 to achieve both in the county businesses, in our own
19 homes, in our vehicles and everything.

20 So we are working on this as a Senate at the
21 federal level to push energy efficiency initiatives
22 throughout the entire country, so I agree with that.

23 Mr. Trisko, let's talk about economic
24 impact. My understanding of -- the Supreme Court came

1 back and disallowed the MATS rule on the premise that --
2 which for those of you who don't know was the previous
3 rule that was -- that has caused a lot of our power
4 generation to go by the wayside -- and they turned it
5 back because the EPA had not considered appropriately
6 the economic impact that that rule would have and that
7 regulation would have on certain communities. Is that
8 in short the reason?

9 MR. TRISKO: Senator, that is exactly the
10 reason. The historical context is this goes back to the
11 Clinton administration -- the last days of the Clinton
12 administration when EPA issued a determination regarding
13 the health impact of mercury. And EPA did not make any
14 findings at that time on the implications of controlling
15 mercury -- the cost of controlling mercury from the
16 electric generating sector. And that's what the Supreme
17 Court found to be --

18 SENATOR CAPITO: So in the Clean Power --

19 MR. TRISKO: -- inconsistent with the law.

20 SENATOR CAPITO: In the Clean Power Plan,
21 does not the EPA have the same parameters -- that they
22 have to consider what the cost is? When you look at a
23 small state like West Virginia -- \$47 billion of
24 economic output, 11 billion of household income, 229,000

1 job years by the year 2040.

2 Now, you know, on the other side, there --
3 you might say well, it's all going to be worth it
4 because of what we see, you know, moving forward. But
5 we're trying to get a balance here to try to figure out
6 how do you balance the economic and environmental
7 impacts. Was -- were these economic impacts considered
8 in their regulatory assessment? I'm not satisfied --

9 MR. TRISKO: No.

10 SENATOR CAPITO: -- they were. In short?

11 MR. TRISKO: No.

12 SENATOR CAPITO: No.

13 MR. TRISKO: No. Those calculations are
14 based at root upon changes in the price of coal and
15 changes in the amount of coal that will be shipped and
16 sold as a consequence of the Clean Air --

17 SENATOR CAPITO: And these metrics --

18 MR. TRISKO: -- of the Clean Power Plan.

19 SENATOR CAPITO: -- were not considered?

20 MR. TRISKO: No. No. And there was a
21 cursory look at job impacts. And the agency determined
22 that the overall Clean Power Plan would cost for
23 implementation to utilities on the order of 3 to \$4
24 billion a year. I mean, not as large as the MATS rule

1 which had been estimated at \$9 billion a year.

2 SENATOR CAPITO: Right. Right.

3 Commissioner, let me ask you this --

4 MR. TRISKO: Pardon me. Senator, just --
5 add one more point.

6 SENATOR CAPITO: Okay.

7 MR. TRISKO: Since we are talking about the
8 Clean Power Plan which is ostensibly the centerpiece of
9 the administration's climate change agenda, EPA did not
10 make any attempt to estimate the climate-related
11 benefits of the Clean Power Plan. All of its benefits
12 assessments were based upon co-benefits from reductions
13 of criteria pollutants such as ozone, sulphur dioxide,
14 PM 2.5.

15 SENATOR MANCHIN: More economic.

16 MR. TRISKO: We've seen it so many times.

17 SENATOR CAPITO: Thank you.

18 Mister -- Commissioner, I think I just read
19 just the other day that one of your neighboring counties
20 here in West Virginia has had a lot of -- lost a lot of
21 people. Their school system, suffering the same
22 budgetary constraints that you are in Wayne County, were
23 unable to buy science books. Did you read that article.

24 MR. PASLEY: Yes.

1 SENATOR CAPITO: For -- I think they got
2 them for the middle school but they didn't -- couldn't
3 get them for either the younger or the high school. I
4 can't recall that.

5 What kind of impacts are you seeing? You
6 mentioned about the business partnerships with your
7 schools. But in terms of being able to run a school
8 system, what are you seeing in Wayne County?

9 MR. PASLEY: Well, now, that department is
10 across the street from the courthouse, and I don't
11 intend to speak for them except the news headline was
12 last week they had a \$1.7 million deficit. Then they
13 were in the news because they could not provide
14 substitute teachers in classrooms, and there were doubts
15 that the children were getting a good education because
16 they herd them all into a commons area because they
17 didn't have the substitute teachers to fill the
18 classrooms.

19 And then they were looking at other -- they
20 are looking at other ways to cut expenditures, but
21 they -- they're under so many mandates, both state and
22 federal, that there's only a certain number that they
23 can cut. So they're facing a \$1.7 million loss now,
24 and -- according to the paper -- and that doesn't appear

1 to be anything that's going to change next year even.

2 SENATOR CAPITO: Let me ask you Karan -- or
3 Ms. Ireland -- sorry, excuse me -- you're on city
4 council in Charleston. Charleston is in -- on the cusp
5 of moving below that critical 50,000 population
6 number --

7 MS. IRELAND: Right.

8 SENATOR CAPITO: Right -- for eligibility
9 for CDGB and other federal benefits. And I know the
10 Mayor. I've talked with him a couple times about it,
11 and it is -- I think it could be difficult for you as a
12 councilwoman and others to cope with that. Part of the
13 population loss I'm sure is tied to what's gone on --
14 even though I couldn't document it --

15 MS. IRELAND: Absolutely.

16 SENATOR CAPITO: -- I'm certain is what's
17 gone on in the coal mining situation.

18 So I guess my question to you would be -- I
19 think -- here, again, I'll speak for all of us -- were
20 all for solar energy. I mean, yeah, that would be
21 great. But as Senator Manchin says, that's not going to
22 replace the 30 percent base load. Sun doesn't shine all
23 the time, and I was just down in McDowell County where
24 it's pretty steep down there. And if you're down in the

1 hollow, you can't --

2 SENATOR MANCHIN: Couple hours.

3 SENATOR CAPITO: It takes a while to find
4 the sun even on a sunny day like today. And so -- and I
5 know that you don't believe that, you know, this is
6 going to be the replacement for a whole energy.

7 MS. IRELAND: Right.

8 SENATOR CAPITO: You talk about employment
9 as well. Is your business -- you're in a nonprofit.
10 You're then coordinating --

11 MS. IRELAND: Right.

12 SENATOR CAPITO: -- manufacturers with
13 installers for personal homes. Does somebody call you
14 on the phone and ask you? I mean, does that bring --
15 you mentioned in your things that more people are
16 employed in this 300 than have been in the past.

17 MS. IRELAND: Right. So the -- what we're
18 seeing across the country -- and West Virginia does have
19 85 percent of the sun that Miami, Florida, has, so we're
20 in a -- we're well-situated to have people go solar --
21 but as we see demand -- and there are all kinds of
22 reasons that people want to go solar. They might want
23 to save on their electric bills. They might want energy
24 independence. I think someone talked about being off

1 the grid, so with battery backup you have the ability to
2 have more self-reliance.

3 And as people become more interested and the
4 prices have dropped, we're seeing an upswing in jobs
5 across the country. But it's been slower to come here
6 to West Virginia, and I think -- I think we're starting
7 to see more of that demand. And so my job is to help
8 those homeowners, small businessowners, farmers --
9 someone -- someone talked about the USDA. They have a
10 great grant program to help those people and connect
11 them with installers.

12 SENATOR CAPITO: Thank you.

13 Mr. Copley, let me just ask you a question.
14 This might be -- I hope this isn't too personal for you.
15 But when you were being informed that you were -- as you
16 put it, your services were no longer needed, did you
17 receive a warn notice at the time before that?

18 MR. COPLEY: No, ma'am.

19 SENATOR CAPITO: Was that because of the
20 position you held or --

21 MR. COPLEY: No. I'm not sure. I actually
22 received a severance package in lieu of a warn notice,
23 so I was compensated somewhat.

24 SENATOR CAPITO: Yeah. Okay. And I'm sure

1 you now -- and there are probably some in the audience
2 here who have received those warn notices -- many people
3 that you know. Could you describe for us -- for the
4 folks that you know -- you didn't personally experience
5 this but you've I'm certain talked with folks -- what
6 that feeling is -- to get that warn notice and know that
7 in 60 days you may or may not lose your job?

8 MR. COPLEY: We see it a lot, especially in
9 our church. We have a lot of people who work for
10 different organizations, people who work union jobs,
11 people who work non-union jobs so a wide array of people
12 in the industry. And I've heard them talk about their
13 warn notices. I've seen spouses who have worried
14 themselves, fretted and talked to their husbands about
15 well, we need to move. We need to leave. We need to do
16 things because I can't wait around for two months to
17 find out if I'm going to have a job or you're going to
18 have a job. What are our kids going to do? What are
19 they going to be facing? We've seen it quite a lot in
20 our communities.

21 And fortunately some of those in our church
22 were spared that, and they were able to continue
23 working. But a lot of them received the same fate that
24 I did. They were -- went ahead and given their -- or

1 not given their notice but actually losing their jobs
2 and being laid off.

3 SENATOR CAPITO: Well, thank you. I would
4 say just -- and I'll turn it over to Senator Manchin
5 after this -- the experience that I've had in talking
6 with folks who find themselves in the same position that
7 you're in and the experience that I've had in talking
8 with communities that are affected, the faith community
9 in West Virginia -- the churches -- if we didn't have
10 such a strong church and belief system -- and you
11 pointed this out in your statement -- to really fill the
12 gaps to help these families, these children that are
13 affected -- so I know your church has been very active,
14 but I think it's important for us to realize what a role
15 our community -- our religious community has played to
16 keep us going.

17 Senator Manchin.

18 MR. COPLEY: It's everything for us.

19 SENATOR CAPITO: Thank you.

20 SENATOR MANCHIN: Gene, first of all, Gene
21 Trisko, if I may ask you, this question is asked of me
22 quite a bit about -- West Virginia has an environmental
23 target on its back by the environmental community -- not
24 just the environmental community, the State of West

1 Virginia or in the United States but let's say
2 globally -- right, wrong or indifferent. Do you think
3 that target is placed because of our mountaintop mining,
4 underground mining, combination of both or people just
5 don't like mining at all?

6 MR. TRISKO: Senator, I don't believe that
7 it has to do with the type of mining that is practiced
8 in West Virginia.

9 SENATOR MANCHIN: So you don't believe
10 mountaintop --

11 MR. TRISKO: Mountaintop --

12 SENATOR MANCHIN: -- brings any more
13 attention?

14 MR. TRISKO: No.

15 SENATOR MANCHIN: Okay.

16 MR. TRISKO: Mountaintop removal gets some
17 media and headline attention, and there are some groups
18 who've focused upon that particular issue. The driving
19 force that is impacting West Virginia's longer-term
20 future in terms of its coal industry is climate change
21 and the perception that the utility industry under the
22 Paris agreement eventually will need to move in the
23 direction of decarbonization. And that's a rather
24 frightening prospect.

1 But I would note this, Senator, because you
2 mentioned earlier concerns about electric reliability
3 and the EIA data. The EIA data that I used to construct
4 these estimates of the impact of just going to a 45
5 percent reduction target, which is little more than
6 halfway toward the 80 percent Paris target, those
7 projections by EIA showed that coal nationally would
8 decline from one-third of the supply of electric
9 generation today to 13 percent in the year 2040.

10 Now, most of the difference would be made up
11 by natural gas and renewables. I think it's appropriate
12 for the Congress to initiate -- to request an inquiry
13 into the impacts -- not only on electric reliability but
14 on our economy generally and particularly of jobs for
15 the unions that I represent.

16 The impact of a future in which coal is
17 consigned to 13 percent of total U.S. electric
18 generation -- and that represents only about 200 million
19 tons of national production from a billion tons five
20 years ago -- because it has very profound implications.
21 And let me cite a historic precedent that is extremely
22 relevant in the climate context.

23 The Clinton administration before going to
24 Kyoto for the negotiations in 1997 for the Kyoto

1 Protocol, commissioned an interagency task force to
2 evaluate the economic job and environmental impacts of
3 the then considered U.S. commitment which was
4 stabilization of U.S. CO2 emissions at 1990 levels. The
5 administration engaged the Department of Energy, the
6 Department of Commerce, FERC, EPA, all of the relevant
7 agencies, hired a slew of consultants to analyze what
8 will happen to this economy if we go down the road of
9 the Kyoto Protocol.

10 The consultants produced their studies in
11 good faith. The interagency task force evaluated them.
12 Produced a report. Now, the bottom line is this: That
13 that interagency task force commissioned by President
14 Clinton found that the implementation of the Kyoto
15 Protocol would result in the loss of 1 million American
16 jobs.

17 As a consequence of that analysis, President
18 Clinton had the good sense never to submit the Kyoto
19 Protocol to the Senate for ratification. It was then
20 subject to the terms of S. Res. No. 98, the Byrd-Hagle
21 amendment, and President Clinton knew that that
22 agreement could not be ratified.

23 Well, here we are again in the context of a
24 Paris agreement -- allegedly a voluntary, nonbinding

1 agreement but that nonetheless which contains very
2 ambitious emission targets that are being taken as if
3 they were legally binding upon this country. It is
4 timely for the Congress to request an assessment on the
5 impacts of a second Paris commitment period.

6 EIA used this number 45 percent reduction in
7 this analysis. What kind of number should the United
8 States put forward if we do put forward a number and
9 what are the impacts? In short, we need to look before
10 we leap.

11 SENATOR MANCHIN: Let me say this though --
12 I've been saying all along, I said, you know if -- in
13 China right now it's not CO2 that's killing people; it's
14 SO2. It's particulates. All of us are old enough
15 remember that you couldn't hang your -- you couldn't
16 hang your laundry on the line -- what would happen back
17 from the plants being closed or if you went to
18 Pittsburgh and drove through the Fort Pitt tunnels, you
19 couldn't see on the other side.

20 We have cleaned up the environment in the
21 United States more in the last two to three decades than
22 ever in the history of the world. We've done more.
23 SOx, NOx, mercury. Then all of a sudden they hit us
24 with the CO2 and just about shut us out of -- so I'm

1 just saying -- real quick if I may.

2 Bo, if I may ask you. If you're talking to
3 the laid off miners that we have right now and you're
4 talking to the families that are affected, do they
5 believe that all of this is because of the overreach of
6 the Federal Government, EPA and the Obama administration
7 or do they also recognize that low-price energy such
8 as -- so much abundant reserves of natural gas have been
9 unleashed on us or which ones -- how would you say they
10 weight it?

11 MR. COPLEY: Well, for the most part, the
12 people that I communicate with, we talk about those
13 things. We talk about the EPA's overreach more than
14 anything, and we understand there's an abundance of
15 natural gas as well. But coal can compete when it's not
16 regulated as much as it is.

17 From our understanding, coal is regulated
18 far more greatly than natural gas is which makes it
19 harder to produce at an affordable price.

20 SENATOR MANCHIN: So basically you all would
21 say -- if you're talking to your family and friends and
22 people in that industry, dependent on that industry,
23 it'd be most of the policy -- political policies more so
24 than the market-driven forces.

1 MR. COPLEY: Yes.

2 SENATOR MANCHIN: That's what they believe.

3 Okay. I needed to know that.

4 For the record, Bob, I want to make sure

5 people understand. This severance tax, you're not

6 saying put a new tax on?

7 MR. PASLEY: No.

8 SENATOR MANCHIN: You're saying keep the tax

9 that's been there forever just about -- the 5 percent.

10 MR. PASLEY: They had served a purpose.

11 SENATOR MANCHIN: Severance.

12 MR. PASLEY: It sent some money back to the

13 coal-producing counties --

14 SENATOR MANCHIN: Right.

15 MR. PASLEY: -- to do the things that we do

16 with them which were good things for our people. I

17 think that's --

18 SENATOR MANCHIN: For the record, I'd like

19 to say also so you know that when you do any type of

20 mining on BLM which is the Bureau of Land Mines -- which

21 is the United States owns this property -- they charge 7

22 percent. 7 percent severance on coal from the Federal

23 Government's land. We charge 5 percent.

24 But I want to say this also. If it wasn't

1 for the coal industry, we would not have ever privatized
2 workers' comp. We would not have moved forward because
3 it was a .56 cent surcharge that the miners and the coal
4 companies paid that took care of a \$4 billion deficit we
5 had, and we could have never gotten out of that hole
6 without it. So credit has to be given where credit is
7 due.

8 MR. PASLEY: Well, and when it was paid, it
9 was removed.

10 SENATOR MANCHIN: That's exactly -- that
11 came off. I think we paid it off early, so we showed a
12 good stewardship. Thank you. I know we've gone over.

13 CONGRESSMAN JENKINS: Thank you, again.

14 SENATOR CAPITO: Yes, Congressman Jenkins.

15 CONGRESSMAN JENKINS: Bo, one more
16 follow-up. You've articulated very clearly about the
17 plight of those like in your own situation that's been
18 put out of work. One of the things that I hear
19 oftentimes and I've been underground a number of times
20 and talking to coal miners is what they call job scare.
21 So somebody's actually going into the mine today to
22 work. Job scare is you're worried about whether or not
23 you're going to get a layoff slip or a warn notice or
24 pink slip when you come out at the end of the day.

1 Is that on your mind as an active, working
2 coal miner -- job scare -- and can that impact your
3 ability to work, work safely, focus on what you're doing
4 or are you thinking about how am I going to provide for
5 my family if -- because of job scare, I'm going to come
6 out and be put out of work?

7 MR. COPLEY: That's definitely on everyone's
8 mind. I mean, even though we talked about it, like I
9 said, in my statement -- we were told we would be okay
10 till the beginning of 2016. Every day we sat down and
11 had a meeting to go over our maintenance plans for the
12 day. We would talk about how we were going to do what
13 we had to do and do it safely. Before our managers
14 would come in and we would already be sitting there,
15 everyone was talking about well, what will you do if
16 they come in and tell us we're having a layoff. What
17 will you do if, you know, they tell us at the end of the
18 day, hey, don't come back?

19 So it's on everybody's mind. And whether
20 you want it to be or not, it will cloud your judgment.
21 It will make you lose concentration on the things that
22 you do every day that keep you safe.

23 CONGRESSMAN JENKINS: Thank you.

24 Gene, you've sat in on the D.C. Circuit

1 Court to a hearing. One of the aspects of this that I
2 don't understand is that this current administration is
3 advancing rules based on laws that were put on the books
4 40, 45 years ago. And in the rules that are being put
5 into place today, based on that decades old law, nobody
6 in the past has ever thought -- even conceived that what
7 they're trying to do by rules today was actually
8 authorized by the law 40, 45 years ago.

9 Am I off base on that? Because, you know,
10 part of my feeling is that this administration is not
11 only using tools in their toolbox, but they're trying to
12 use tools that aren't even in their toolbox and they are
13 taking this interpretation of a law from decades ago in
14 a way that nobody ever conceived of, but they're doing
15 it to advance their ideological agenda.

16 MR. TRISKO: Congressman, you're spot on.
17 The provision that the administration is relying on in
18 the Clean Power Plan, Section 111(d) of the Clean Air
19 Act is an oddball provision that does not apply either
20 to hazardous air pollutants regulated under Section 112
21 or to criteria air pollutants regulated under 108, 109
22 and numerous other provisions of the Act.

23 EPA has used Section 111(d) on only five
24 occasions in its history -- mainly for municipal

1 landfills and unusual kinds of situations. And 111(d)
2 has been used only once since the enactment of the 1990
3 Clean Air Act amendments. And that's indicative of its
4 rare status among Clean Air Act provisions.

5 CONGRESSMAN JENKINS: I have a very strong
6 feeling about this -- another tool that the
7 administration is using in its war on coal, and that is
8 the use and adoption of what they're characterizing as
9 this social cost of carbon. And in my opinion -- and
10 tell me if I'm off base -- they have crafted up this
11 concept of a social cost of carbon to justify
12 economically their -- what I characterize as very
13 onerous regulations that have this economic impact.

14 So they're -- what can you tell me about
15 this concept of social cost of carbon? Is it in the
16 law? Is it something they've just cooked up to justify
17 their regulations? And it's my understanding that the
18 OMB has even pointedly told the administration with some
19 of their factors you're not even, you know, using the
20 right numbers. What do you know about that issue?

21 MR. TRISKO: Congressman, it is largely a
22 regulatory invention and not a creature of statute.
23 There are numerous conceptual problems with the social
24 cost of carbon which typically is applied in terms of a

1 dollar value per ton of CO2 avoided and based upon a
2 variety of estimates of avoided damages associated with
3 climate change -- sea level rise, temperature increase,
4 forestry impacts, so and so forth.

5 And all of those underlying estimates of
6 future damage function and avoidance miss one
7 unavoidable fact and that is that this planet is facing
8 a steadily increasing concentration of greenhouse gas
9 emissions led largely by emissions by developing
10 nations -- not us; not the EU. Those concentrations
11 will continue into the foreseeable future, not
12 withstanding the Paris agreement.

13 Because the facts on the ground in most of
14 the world -- and I'm not talking about rich, industrial
15 nations like the United States or the EU -- the facts on
16 the ground are that people need energy in order to
17 improve their economic conditions, to alleviate poverty,
18 to provide basic education, healthcare, clean water
19 services. And they will rely on coal as a mainstay of
20 that energy future, and that will increase over time CO2
21 concentrations.

22 Our social cost of carbon estimates are
23 purely a fiction of damage avoidance based upon a house
24 of cards of assumptions of damage avoidance. You need

1 to be focused upon what's going to happen in the real
2 world, and the rest of the world is more focused upon
3 putting food on the dinner table at night as a primary
4 objective than they are upon reducing their carbon
5 footprints.

6 CONGRESSMAN JENKINS: Thank you.
7 Thank you, Madame Chair.

8 SENATOR MANCHIN: Well, thank you all. I
9 think we've had a great discussion here. I want to
10 thank the panelists particularly. Many of you traveled
11 long distances so thank you for that.

12 I would like to say for the record that my
13 ranking member on the subcommittee, Senator Tom Carper
14 from Delaware, expressed his regret that he was unable
15 to attend today. But he's a -- he was actually born in
16 West Virginia, but he represents Delaware. So I wanted
17 to make sure that officially we recognize that Senator
18 Carper did try to make this hearing today.

19 And with that, we'll adjourn the hearing and
20 thank you all.

21 (Hearing concluded at 2:58 p.m.)
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