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COMMONWEALTH OF PENNSYLVANIA
HOUSE OF REPRESENTATIVES
ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE

CAPITOL BUILDING
ROOM 60, EAST WING
HARRISBURG, PENNSYLVANIA

PUBLIC HEARING ON THE IMPACTS
OF THE U.S. EPA'S CLEAN POWER PLAN

TUESDAY, SEPTEMBER 16, 2014
9:05 A.M.

BEFORE:

- HONORABLE RON MILLER, MAJORITY CHAIRMAN
- HONORABLE MARTIN T. CAUSER
- HONORABLE BECKY CORBIN
- HONORABLE ELI EVANKOVICH
- HONORABLE MATTHEW GABLER
- HONORABLE TIMOTHY KRIEGER
- HONORABLE DONNA OBERLANDER
- HONORABLE JEFFREY P. PYLE
- HONORABLE KATHY L. RAPP
- HONORABLE CHRIS ROSS
- HONORABLE GREG VITALI, MINORITY CHAIRMAN
- HONORABLE MIKE CARROLL
- HONORABLE FRANK FARINA
- HONORABLE STEVE MCCARTER
- HONORABLE KEVIN SCHREIBER
- HONORABLE PAM SNYDER

ALSO PRESENT:

- JONATHAN LUTZ, E.D., REP. MILLER STAFF
- SARAH CLARK, E.D., REP VITALI STAFF

BRENDA J. PARDUN, RPR
REPORTER - NOTARY PUBLIC

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37		
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P R O C E E D I N G S

MAJORITY CHAIRMAN MILLER: I apologize for the delay. Personally, I sat in the parking lot called I-83 for a while, but -- so, a lot of the members will be coming in later and leaving. We have a lot other meetings going on today. But if we start over here. I'm Representative Ron Miller. I'm majority chairman of the House Environmental Resources and Energy Committee.

MINORITY CHAIRMAN VITALI: Greg Vitali, minority chairman.

MAJORITY CHAIRMAN MILLER: Kathy.

REPRESENTATIVE RAPP: Representative Kathy Rapp. I represent Warren, Forest and McKean counties.

REPRESENTATIVE PYLE: Good morning. State Representative Jeff Pyle, 60th Legislative District, Armstrong, Indiana, and Butler counties.

REPRESENTATIVE CORBIN: Good morning. Becky Corbin, 155th District in Chester County.

REPRESENTATIVE CAUSER: Good morning. Marty Causer, 67th District, McKean,

1 Potter, Cameron counties.

2 REPRESENTATIVE KRIEGER: Good
3 morning. Tim Krieger. I represent the 57th
4 Legislative District, in Westmoreland County.

5 REPRESENTATIVE SNYDER: Pam
6 Snyder, the 50th District, Greene, Washington,
7 and Fayette counties.

8 MAJORITY CHAIRMAN MILLER: Thank
9 you, everyone.

10 We wanted to have this hearing
11 earlier this summer, when the EPA was in
12 Pittsburgh, but we could not make the
13 logistics work. So, I'm very grateful to all
14 of the presenters that are here, the guests
15 who are participating in today's public
16 hearing on the administration's Clean Power
17 Plan.

18 While reducing pollution is always
19 of the utmost importance and we can readily
20 understand the goals of the Clean Power Plan,
21 the impacts this plan may have on the
22 residents and businesses of Pennsylvania must
23 be assessed before it moves forward. Today,
24 we will hear testimony from a variety of
25 stakeholders on the affects we may see as a

1 result of the implementation of the plan as
2 proposed.

3 We do have a full agenda today,
4 but before we call up our first guest, I want
5 to recognize Chairman Vitali for any opening
6 comments you might have.

7 MINORITY CHAIRMAN VITALI: Thank
8 you. Thank you. Thank you, Chairman Miller
9 for doing this.

10 Is this on?

11 Thank you, Chairman Miller, for
12 doing this. This is a very impressive array
13 of speakers. This is a very important issue.
14 Climate change, which this power plan seeks to
15 address, is an incredibly important issue. We
16 as a planet, we as a county, we as a state
17 need to drastically reduce CO₂ production, and
18 there's a variety ways to do that, which this
19 power plan gives Pennsylvania the option of
20 doing that.

21 With any shifting, and in this
22 case it will probably be a shifting of coal to
23 natural gas to renewables to increased energy
24 conservation, there will be job changes.
25 There will be increased jobs perhaps in the

1 natural gas sector, decreased jobs in the coal
2 sector, increased jobs for engineers and
3 manufacturers and other people who are
4 involved in this shift.

5 My only concern in looking at this
6 very impressive array of speakers, very
7 impressive, is that -- and I see Christina
8 Simeone, who is more -- who's great -- but I'm
9 just wondering, is there a balance here to
10 really bring out the need to do this power
11 plan. The positive environmental impacts, the
12 positive economic impacts that will occur. I
13 mean, I'm going to keep an open mind as we
14 move through and listen to the speakers, but
15 my hope is that if the benefits of this power
16 plan are not adequately threshed out at this
17 hearing perhaps we can have a second hearing
18 that talks about the desperate need for this
19 nation and state to do something to address
20 this very important issue.

21 MAJORITY CHAIRMAN MILLER: Thank
22 you, Chairman Vitali.

23 Our first presenter is John Pippy,
24 CEO, PA Coal Alliance.

25 Welcome, John.

1 MR. PIPPY: Good morning,
2 Mr. Chair, Chairman Vitali, members of the
3 committee. It's a privilege to be here in
4 front of you, and I appreciate the opportunity
5 to testify on behalf of my constituency, the
6 over 300 companies in the Pennsylvania Coal
7 Alliance and the over 36,000 employees in the
8 industry sector.

9 As was mentioned earlier, the
10 Pennsylvania Coal Alliance represents the
11 bituminous sector. I just want to make that
12 clear. We have a friend in the anthracite
13 region that has their own state association.
14 But 90 percent of our coal mined here,
15 bituminous coal mined in Pennsylvania goes to
16 power generation. Actually, it's over 80
17 percent. So, there is a direct link between
18 how we make electricity and the coal mines
19 here in the commonwealth.

20 As a trade association
21 representing to bituminous operators, we like
22 to talk not only about the men and women who
23 mine the coal, but all the jobs associated
24 with it, the economic impact and, of course,
25 the value to low-cost electricity. Here in

1 the Commonwealth, coal accounts for 40 percent
2 of the electricity generated in Pennsylvania.
3 Thus, any law that either deliberately or
4 would unintentionally significantly impede
5 coal usage by electric generators not only
6 threatens affordability but also reliability
7 of the electricity to tax -- to ratepayers.
8 We could also cause severe economic
9 consequences to coal production jobs,
10 livelihoods, local tax bases and the overall
11 economy.

12 Now, let me make it clear, when
13 you're literally the largest player in the
14 electricity market right now -- and it
15 varies. I mean, it dips. Between us, natural
16 gas, and nuclear in Pennsylvania, we're
17 blessed. I mean, that accounts for over 90
18 percent of our electricity. Even at our
19 low-water mark, we're over a third. Back in
20 2012, we were over a third of the generation.

21 As we talk about newer forms of
22 electricity, I think one of the fundamental
23 questions that has to be asked is, okay, as we
24 see a transformation, what are the actual
25 steps that are going to occur, literally? How

1 will this occur? What will the costs be?
2 What will the implementation process be? And
3 then, as Chairman Vitali mentioned earlier,
4 what are the cost benefit analyses?

5 Unfortunately, we believe that
6 EPA's proposed clean energy plan represents a
7 significant obstacle to continuing using
8 coal. And I will lay out in my testimony
9 why.

10 Under the proposed plan,
11 Pennsylvania's average interim emission rate
12 goal from 2020 to 2029 is 1,179 pounds per
13 megawatt hour. And its final emission goal is
14 1,052 per megawatt hour. I'm getting
15 technical here, but it's the details that are
16 causing the problem. The talking points from
17 Washington are tremendous. Flexibility, state
18 options, but it's actually the written
19 language that is the problem. And this isn't
20 uncommon in some other things we see
21 sometimes.

22 To achieve the final goal,
23 Pennsylvania would have to reduce our
24 emissions by 32 percent over our 2012
25 numbers. And if you just take a little step

1 back to 2005 as a baseline year, which is a
2 baseline which EPA uses a lot when they talk
3 about national goals, we would actually see a
4 42 -- correction, 44 percent reduction, almost
5 half in our CO₂ emissions from 2005.

6 That brings up one of the big
7 questions that we've asked the EPA during the
8 hearings in Pittsburgh recently and followed
9 up with written requests. Will the
10 commonwealth get the credit for the good work
11 that you and others did? And I'll even brag a
12 little. I was one of the people that voted
13 for it and a cosponsor of the alternative
14 energy portfolio standard, being from western
15 Pennsylvania. I'm an environmental engineer.
16 I believe in continuous progress, but I also
17 believe in reality and finding a way to make
18 -- take those incremental steps.

19 We've been able to accomplish
20 these reductions as a commonwealth while also
21 maintaining lower than the national average
22 rates of electricity, seeing a growth and a
23 jump in our renewables, requiring power
24 generators to help reduce demand and increase
25 efficiencies, and overall we've done well

1 under this plan.

2 The irony is that we've already
3 seen a 12 percent drop, as a mentioned
4 earlier, by 2012. By 2022, we would have seen
5 a 22 percent reduction in CO₂ emission
6 standards. The president, two years ago, was
7 in Georgetown and talked about how great it
8 would be to get a 17 percent reduction, so I
9 was excited because I thought we were good in
10 Pennsylvania. We were already making
11 progress, and we will continue to make
12 progress as the economy shifts and we look
13 at -- you know, growth and newer sources of
14 energy. But that's not the case. This
15 language is very specific and it, fully
16 implemented, would be disastrous to coal
17 production.

18 Why? Well, if you look at the EPA
19 proposal, it includes four options or, quote,
20 building blocks that they believe would be
21 best strategies for emission reduction that
22 states could deploy in a mix and match fashion
23 to meet their targeted reductions.

24 The first would be improving heat
25 rate efficiencies at the affected EGUs to

1 reduce carbon intensity, i.e., make them more
2 efficient, make efficient improvements to the
3 process; therefore, it will take less coal to
4 make the same amount of energy. That's just
5 like -- it's very similar to getting improved
6 gas mileage in your car. A 2014 car is much
7 more efficient than a 1970s car. You get more
8 miles per the gallon.

9 The challenge here, though, is --
10 and these are the types of things that I think
11 the legislature is appropriate in asking. Of
12 our existing plants that's still running, how
13 many have made those upgrades already? So,
14 that takes them off the list. And then, those
15 that are left, how many could potentially make
16 those upgrades in a level, a way where it
17 would be cost effective, where they would
18 capture the value for their investment, and,
19 probably the most important question is, if we
20 improve the efficiencies and put the
21 permitting request in, do we then fall under
22 the NSR triggering mechanisms which eliminates
23 sort of a lot of the grandfathering some of
24 the older plants have. Those are just very
25 basic questions that hopefully we'll get

1 answered. But they're critical because EPA is
2 making a lot of assumptions here. That's --
3 assumptions, it's an interesting word, but
4 when you assume a lot of things, I remember
5 hearing from military leaders and my parents,
6 you'd better be careful when you assume.
7 That's all I'll say. But they're making a lot
8 of assumptions.

9 And the challenge here is we have
10 the talking points in Washington, which were
11 tremendous, but there's a huge gap between the
12 talking points of 30,000 feet and the reality
13 when the boots are on the ground or the
14 rubber's on the road or the men and women are
15 in the mines. And those are the questions
16 we're just asking that you get answers to
17 as policy makers and then make sound
18 decisions. And they will be balanced, we
19 would hope.

20 The second issue is the
21 opportunity to load -- for load shifting and
22 redispatching, i.e. switching from coal to
23 potentially natural gas combined cycle units
24 and other options. Once again, sounds great,
25 but when coal makes up 40 percent right now, a

1 little over 40, and even on the low mark it
2 was in the high 30s, has anyone actually
3 checked to see if there is enough capacity?
4 And while the administration's very supportive
5 of the switching, where are the federal rules
6 that would help put -- help support the
7 necessary pipeline and infrastructure
8 necessary to make that switch? I.e., if you
9 have this amount of energy from coal and you
10 want to go to natural gas or others, could
11 someone just do the basic math and you get
12 those questions answered? And then, of
13 course, at what price would that be and how
14 long would it take?

15 I mean, these are very basic
16 questions, but, we're at a point now, folks,
17 where this -- the rule will be implemented by
18 the next year that they'll have the final
19 implementation, and the commonwealth will have
20 a year, potentially two, depending on if
21 you're given an extension. So, there's a lot
22 at stake and still a lot of questions
23 unanswered.

24 Renewable generation increases is
25 a great thing. We've seen, I believe -- and

1 correct me, I could be off a little, but the
2 scale's about right -- 1 percent for our wind
3 and a little over half a percent for our
4 solar. And even if we double it, we're at 3
5 percent, that still doesn't fill the gap. And
6 if we -- we talk about the pipelines issue,
7 all I'm saying is that there are a lot of
8 steps, questions that need to be answered
9 and should be considered when you're making
10 a plan. That's just basic project
11 management.

12 And we're at that point now where
13 people are asking, I think, very legitimate
14 questions and where it's appropriate for the
15 legislature to be involved.

16 The final one is outside the
17 fence. Efficiencies, demand reduction, those
18 types of things. Great idea, supportive of
19 it. There are a lot of ways to do it.
20 However, who's responsible for it, how do you
21 quantify it, and if it doesn't occur, how do
22 we consider that part of an implementation
23 plan? I mean, there is a huge gap between the
24 talking points associated with this language
25 and the actual reality of how it would be

1 done.

2 With all that being said, there
3 has been some analysis done, and DEP has come
4 back and said, if fully implemented, we would
5 see a 70 percent reduction in coal utilization
6 within the next 16 years, by 2030, 70 percent
7 reduction. With that 70 percent reduction, we
8 would -- our coal fleet would decrease from 55
9 percent capacity, which is not good anyways
10 but they are surviving, down to 17 percent
11 capacity factor. It isn't economical. There
12 would be very few that could survive under
13 those conditions. That's such a low capacity
14 factor.

15 Given the benefits we've seen by
16 having an all-of-the-above strategy, I think I
17 brought up some very significant questions
18 that, at a minimum, we should have answers
19 to. And this -- this is not John or the coal
20 lives debating an environmental group. We're
21 not saying: Believe me versus them. What
22 we're saying is, bring the experts in all on
23 sides and do the math. And if the math shows
24 what I'm saying, then maybe some adjustment's
25 necessary prior to implementation. That's

1 it. In the military, we call it tactical
2 pause. Completely understand the
3 environment -- no pun intended -- we're
4 living in before we -- before we make
5 actions.

6 I'm not going to get into the
7 reliability issues. I think I talked a little
8 bit about that, as far as pipeline capacity.
9 We saw a little of that during the polar
10 vortex. Some tried to use that as examples on
11 both sides of crisis. There are significant
12 returns. From my perspective, I think it was
13 an opportunity for us to see how our system is
14 standing up to the challenges, and I would ask
15 you to keep an eye on that.

16 As we've had this discussion, I'll
17 end on a couple quick thoughts -- and you have
18 my written testimony to look at if -- for some
19 of the specifics. All these things being said
20 and all being equal, we've made tremendous
21 strides here in the commonwealth, and we will
22 see over 22 percent reduction. Yet don't
23 forget, if fully implemented, we will see
24 literally billions of dollars of costs here in
25 the commonwealth and in the coal fields of

1 Pennsylvania, in the coal fields of the United
2 States, but the actual CO₂ production that is
3 being discussed would be minimal.

4 Let me say that again, because we
5 are no longer the driver of this. If you look
6 at the growth in CO₂, CO₂ not from the United
7 States. As a matter of fact, if you look at
8 all the international charts, by 2017 coal
9 will be the number one source of energy. So,
10 if our line is down a little for flat and the
11 rest of the world is going up, making us less
12 less flat or a little tiny bit on the downward
13 slope but costing us hundreds of billions of
14 dollars, is that maybe the right step to
15 take? I would argue that we continue to take
16 those steps, but we make sure we do it in a
17 way where the questions I brought up earlier
18 are answered. And that really, from our
19 perspective, is the debate. So, when others
20 say this is about, you know, total reduction,
21 it's actually about a very, very small amount
22 reduced but putting us in a scenario where the
23 rest of the world will have a diverse
24 portfolio and we won't. And there's a lot of
25 strategic implications with that.

1 So, I'll stop. I appreciate you
2 allowing me the time to testify, and I'm happy
3 to answer any questions, Mr. Chairman.

4 MAJORITY CHAIRMAN MILLER: Thank
5 you, John. We do have time for a few
6 questions.

7 Representative Vitali.

8 MINORITY CHAIRMAN VITALI: Thank
9 you, Mr. Chairman.

10 Thank you, Senator.

11 Just a couple of perhaps more
12 comments you might want to respond to. You
13 noted correctly that this is just a proposal
14 right now. This is an EPA proposal. Comments
15 have been made; adjustments are going to be
16 made. So, nothing is set in stone.

17 I also want to make it clear that
18 this EPA proposal doesn't mandate any specific
19 reduction. Doesn't mandate coal shut down,
20 doesn't mandate, you know, anything with
21 renewables. It's all up to us, as a state, to
22 choose.

23 The third point I want to make is
24 with regard to getting credit for what we've
25 already done. It's my understanding that, in

1 the proposal, they used 2005 as a base year.
2 That's what I saw in my readings -- we'll have
3 to debate that if you don't agree -- for that
4 very reason, so we would get credit for that
5 30 percent reduction. But rather, so we would
6 get credit for what we've already done. We
7 have set that 2005 as a base year.

8 As far as the amount of the
9 reduction, the 30 percent, it's my
10 understanding that's just based on scientific
11 calculations. You know, we are at a level in
12 the atmosphere where we have about 450 parts
13 per million CO₂, and some scientists,
14 including James Hansen, say we need to get
15 down to 350 parts per million to kind of keep
16 our earth's climate in the same state where
17 civilization evolved. So, that 30 percent
18 number, it might be something we don't like,
19 but it's driven by sound science.

20 And to your final point that
21 Pennsylvania, well, if we just did our part,
22 it wouldn't have much of an affect, this plan
23 doesn't assume that Pennsylvania has to solve
24 the entire planet's climate problems, but we
25 do have to do our part. Someone once used the

1 analogy to me, if you have half a dozen people
2 sitting in a lifeboat that's filling up with
3 water, and you make the calculation, well, I
4 can bucket out the water as quickly as I want,
5 but it's not going to make any difference
6 because I can't get all the water out. To
7 save ourselves, we all have to get the buckets
8 and we all have to start bailing, and I think
9 that's the concept. Pennsylvania needs to
10 sort of bail and hope that everyone else
11 bails, too.

12 They are my comments, and I
13 welcome your response. Mr. Chairman, do I
14 have a minute?

15 MAJORITY CHAIRMAN MILLER:

16 Specifically on the date, that's --

17 MR. PIPPY: Yes. I think the
18 charts we see, the spreadsheets that were used
19 went to 2009 -- or correction, 2012 for most
20 of them. However, if we do use a 2005
21 baseline, then it would actually be a 42
22 percent reduction.

23 And Mr. Chairman -- Chairman
24 Vitali, that's really the issue here is that
25 it would be great if they specifically said

1 "no coal," because then at least it would be
2 out there. But I mentioned that the pounds
3 per CO₂ per megawatt hour, that rate, at the
4 beginning of my testimony. With coal
5 averaging between 1800 and 2000 and natural
6 gas being about -- I think it was 1100 or so
7 on average, the only way we get down to
8 10-something is you eliminate coal. There's
9 no -- that's where those numbers come from.
10 So, that, I think, is just a question.

11 As it relates, you mentioned the
12 450 parts per million down to 350, that will
13 be great, but that's not the direction we're
14 going. And that's my point, is that, at 1
15 percent for the United States, so, if we
16 were -- it's at 450, so 1 percent would be 4
17 and a half. So, we would go to -- you would
18 argue 445, but we're actually going to the
19 other direction. We're going to be in the
20 460s, 470s because of what's happening around
21 the world. And all our reduction, if
22 completely implemented, wouldn't account for
23 more than two weeks of power generation in
24 China.

25 So, my argument is, we are

1 starting to hear that, Well, we need to do
2 this because we've got to reduce. Well, just
3 get the numbers, and you'll see that we're
4 actually not reducing. And then when you ask
5 the EPA about it in Washington, they'll tell
6 you, well, we need a leveraging tool so when
7 we go to Paris and other places, we can say
8 we're doing it well. Well, we actually are.

9 So, I appreciate the comments, but
10 I would ask that you -- the numbers there, I
11 think, support our argument that we could take
12 a very reasonable path where we lead the world
13 in not only technology for clean coal and
14 renewables and natural gas and nuclear, but we
15 also do it in a way where we're balanced. So,
16 that's what we ask. But I appreciate your
17 comments, Mr. Chairman.

18 MAJORITY CHAIRMAN MILLER:
19 Representative Evankovich.

20 REPRESENTATIVE EVANKOVICH: Thank
21 you, Mr. Chairman.

22 Thank you, Mr. Pippy. I
23 appreciate your comments.

24 You know, I tend to agree with you
25 that for all the good intentions for what this

1 is trying to -- the problem this is trying to
2 address, that the efforts should be placed
3 somewhere other than in the U.S., where a lot
4 of the good clean-up efforts have been
5 underway for decades.

6 And my question is, really, at
7 what point are we, for lack of a better term,
8 stepping over hundred dollar bills to pick up
9 pennies for cleaning up our environment as far
10 as energy production goes? What -- what
11 low-hanging fruit, what high fruit in the tree
12 has already been picked as far as improvements
13 that have been made to energy generation, coal
14 fired, and, specifically, what improvements
15 have been made to the existing plants across
16 Pennsylvania?

17 You had made reference to that
18 whenever you were talking about the math, and
19 I just wanted to know if you could educate the
20 committee as to what specifically has been
21 done over the last few decades to improve the
22 situation.

23 MR. PIPPY: Traditionally, when we
24 use the term "clean coal technology" prior to
25 the last five years, we're talking about NOx,

1 SOx, particulates, mercury and others. We
2 were talking about the additional scrubbers,
3 the electrostatic -- I'm an environmental
4 engineer. Electrostatic -- those technologies
5 that help clean up the -- precipitated -- boy,
6 it's tough. I'm nervous in front of you
7 guys.

8 So, it was the technology to help
9 make, literally, our region cleaner,
10 healthier, reduce the particulate matters.

11 The irony of this is, a year ago,
12 the federal government implemented a new
13 source for foreign standards that would
14 require CO₂ level that's just not achievable
15 with current commercially available
16 technology. Because what I would argue is, if
17 you go just south of Pittsburgh about an hour,
18 you go to Longview Power Plant, built in
19 2009. They use Pennsylvania coal; they meet
20 every standard except the CO₂. That's
21 hundreds of billions of dollars nationally
22 that's spent over the last 20 years to get us
23 to where we need to be on those type of
24 emissions.

25 The challenge here is the CO₂, and

1 as Chairman Vitali mentioned earlier, 450 is a
2 number that's been talked about. Well, we
3 don't impact that number. So, I would say
4 that, best case scenario for me would be some
5 of our older plants, you let us build new
6 plants to replace the older. It's 95 percent
7 cleaner, meets all the requirements except
8 CO₂, and in 15 years when carbon capture
9 sequestration is commercially viable, then you
10 require that. But you don't require it in
11 today's law or proposals. So, that's the
12 challenge.

13 REPRESENTATIVE EVANKOVICH: So, I
14 guess what you're saying is that the available
15 technology, investments have been made to the
16 point today where the only way to meet the
17 standards for CO₂ -- forget about all the
18 other things that have been addressed, the
19 only way to meet those new standards is to
20 eliminate coal.

21 MR. PIPPY: Under the -- with the
22 currently available technology, you would have
23 to replace coal with something else. It
24 doesn't say eliminate coal. It just says, you
25 need to shoot at a target that's here

1 (pointing). Coal's here (pointing). The only
2 way you get to that target is to shoot your
3 arrow at coal.

4 REPRESENTATIVE EVANKOVICH: Thank
5 you.

6 MR. PIPPY: Thank you.

7 MAJORITY CHAIRMAN MILLER:
8 Representative Krieger.

9 REPRESENTATIVE KRIEGER: Thank
10 you, Mr. Chairman.

11 Thank you, Mr. Pippy.

12 My question's based first on an
13 assumption. Let me state that assumption,
14 being mindful of your comments about
15 assumptions. I think it's clear that the
16 renewables, at least under present technology,
17 will not replace coal in our lifetime. So,
18 that's the assumption of this question.

19 It seems to me, then, that natural
20 gas is the only place we're going to go. Has
21 anyone calculated what we could expect the
22 price of natural gas to increase to under that
23 kind of scenario? And then two questions
24 following that. Have we calculated what it
25 will cost for the average consumer? And have

1 we taken into consideration, particularly with
2 regard to pipelines, the reliability issues
3 that will come from that?

4 MR. PIPPY: I can't speak for the
5 natural gas. I use the EIA, which is the
6 federal agency, and you can type in
7 "Pennsylvania." It will tell you our
8 production numbers. They have charts every
9 year that talk about potential cost if natural
10 gas, coal, nuclear, et cetera. The challenge,
11 though, in all those charts, they have a
12 little asterisk by them saying not -- doesn't
13 include pending regulation.

14 So, I think those are very
15 legitimate questions, Representative, that
16 need to be answered. And it gives -- this
17 is -- I'm trying to bring this debate back to
18 the middle. This isn't about energy or jobs
19 versus the environment. It's about, if we, as
20 policy makers and at the federal and at the
21 state level, decided we are looking at
22 reducing carbon footprints and doing these
23 steps, completely valid. But you also have a
24 responsibility to actually outline the steps
25 and have all the data in front of you when you

1 make those decisions, and those -- the
2 questions you just asked are some that we
3 believe should be answered and taken into
4 consideration as you develop an implementation
5 plan that would impact us for the next couple
6 generations.

7 MAJORITY CHAIRMAN MILLER: Thank
8 you. For the sake of time, I'm going to allow
9 one more question, Representative Pyle, and
10 then we will move on to the next presenter.

11 REPRESENTATIVE PYLE: Mr. Pippy, I
12 have one question.

13 In listening to you intently, you
14 said currently coal is what percentage of
15 electrical consumption?

16 MR. PIPPY: Approximately 40
17 percent of our power comes from coal.

18 REPRESENTATIVE PYLE: And when you
19 add nuke and gas into it, that number climbs
20 up to?

21 MR. PIPPY: Over 90.

22 REPRESENTATIVE PYLE: Over 90.

23 In this testimony, it says wind
24 and solar generate about 1 and a half percent.

25 MR. PIPPY: That's the number I --

1 1.6, but when you look at it, wind's about -- a
2 little over -- around roughly 1, and solar's
3 at --

4 REPRESENTATIVE PYLE: So, if we
5 doubled it to 6 --

6 MR. PIPPY: That would be
7 quadrupling.

8 REPRESENTATIVE PYLE: Quadrupling
9 it to 6 -- thank you. I was a social studies
10 guy, not an environmental engineer.

11 What my question is, is if we
12 reduce all this coal-generated generation and
13 we add 6 percent in the renewable, plus what
14 we've already got that's unaffected, we still
15 don't hit a hundred percent. There's about a
16 24 percent gap in there.

17 MR. PIPPY: I don't know if
18 there'll be 24, Representative, but I do
19 believe that that's a legitimate question as
20 to what would be available. Because, as
21 you've seen in any Pennsylvania -- and I'm not
22 going to say that you wouldn't -- natural gas
23 would obviously pick some of it up, as will
24 demand response. And I think my friends from
25 power generation, Jake, will be able to give

1 you a much better answer with slides on that.

2 But the question becomes, at what
3 cost and for how long? Because it will be a
4 dynamic shift if you go from coal being the
5 significant base load to another source. And
6 so, that -- I don't think that question's been
7 answered yet. There's been talking points
8 about it, potential, but when the rubber hits
9 the road, that number needs to be out there.

10 REPRESENTATIVE PYLE: I'll respect
11 the chairman's directive and limit myself, but
12 I think we've just opened a can of worms,
13 Chairman, and this needs discussed much more
14 fully.

15 Thank you.

16 MAJORITY CHAIRMAN MILLER: Thank
17 you.

18 Thank you, Mr. Pippy. Being
19 nervous in front of a House committee is
20 interesting. I remember being nervous in
21 front of you as a young House member or a
22 rookie House member.

23 Thank you for your testimony.

24 MR. PIPPY: Appreciate it. Thank
25 you.

1 MAJORITY CHAIRMAN MILLER: Our
2 second guest today is Stu Bresler, PV, market
3 operations, PJM.

4 Stu, whenever you're ready. Thank
5 you for coming today.

6 MR. BRESLER: Good morning,
7 Chairman Miller, Chairman Vitali, members of
8 the committee. My name is Stu Bresler. I am
9 vice president of market operations at PJM
10 Interconnection. And it is a pleasure to have
11 the opportunity to appear before you this
12 morning, discuss PJM and its responsibility
13 specifically in relation to EPA's recently
14 released Clean Power Plan. So, thank you very
15 much for having me today.

16 I do have a few slides that I
17 brought, just for those of you who can see
18 them. I apologize, Mr. Chairman,
19 Mr. Chairman, that they're behind you.
20 Really, just to -- just to show some graphics,
21 just to remind folks who PJM is and what we
22 do.

23 So, if you'd go to the first
24 slide, please. PJM is the federally regulated
25 regional transmission organization operating

1 in all of Pennsylvania and all or parts of
2 twelve other states plus the District of
3 Columbia. You can see that PJM's region
4 serves about 61 million people and covers an
5 area of about 243,000 square miles, centrally
6 located in the mid Atlantic states, extending
7 out into the mid west and covering the greater
8 northern Illinois area as well.

9 As an RTO, a regional transmission
10 necessary organization, PJM operates as a
11 not-for-profit organization. We do not own
12 transmission facilities nor generation
13 facilities, nor do we buy or sell power as a
14 market participant in the region.

15 PJM's primary responsibility -- if
16 you want to hit the second slide for me,
17 please -- job one, as we like to call it, is
18 maintaining the reliability of the bulk power
19 transmission grid both in minute-to-minute,
20 day-to-day operations as well as in the longer
21 term planning arena. Because electricity
22 cannot be stored and it is consumed, used as
23 it is generated, PJM maintains the generation
24 and load balance for the region that we serve
25 and also plans to ensure that we have

1 transmission facilities sufficient to deliver
2 that bulk power to the load where it is
3 actually consumed.

4 PJM's responsibilities do not
5 extend into the retail markets. Those are the
6 responsibility and the jurisdiction of the
7 Pennsylvania Public Utility Commission and the
8 other state commissions in the region, again,
9 where PJM operates.

10 PJM also operates open,
11 transparent, nondiscriminatory markets for
12 electricity. I like to say that that is job
13 1A, because the operation of the electricity
14 markets in the PJM region are there solely for
15 the purpose of reinforcing reliable grid
16 operations. Those markets are there in order
17 to provide the physical asset owners in the
18 PJM region with the financial incentive to
19 follow the direction of the centralized system
20 operator and act in the best interest of
21 maintaining reliability.

22 The third slide that's up there
23 now really just shows the most significant,
24 the highest voltage, if you will, bulk power
25 transmission facilities and really illustrates

1 the complexity of the transmission grid and,
2 again, some more detail of the region that PJM
3 serves.

4 So, as we're all aware, earlier
5 this summer, the U.S. EPA proposed its Clean
6 Power Plan. PJM technical staff has conducted
7 a thorough review of that plan to ensure that
8 we understand its components and those four
9 building blocks that were mentioned earlier
10 with respect to how the plan is intended to
11 work.

12 PJM clearly recognizes, though,
13 that the states will be the implementing
14 authorities through the execution of state
15 implementation plans. And the state
16 implementation plan in Pennsylvania will be
17 developed by the Pennsylvania Department of
18 Environmental Protection.

19 PJM believes, though, that we
20 could be a resource to the states in our
21 region as those state implementation plans are
22 developed in conformance with the eventual
23 final rule that stems from the initial Clean
24 Power Plan.

25 PJM, in fact, has recently

1 committed to perform an analysis that will
2 focus primarily on the cost of compliance for
3 the PJM states. And PJM committed to do this
4 analysis at the request of the Organization of
5 PJM States, Incorporated, or OPSI, which is
6 the regional state group in PJM's region that
7 contains representatives from each of the
8 state commissions in the PJM region. Again,
9 this is the specific analysis that was
10 requested by OPSI that focuses on the states'
11 cost to comply with the CPP as it's proposed.
12 And PJM's analysis will largely utilize the
13 assumptions that the EPA included in that
14 Clean Power Plan.

15 The PJM will also run
16 sensitivities around that primary analysis in
17 order to gain a better understanding and show
18 more of the implications of the interactions
19 of all of those assumptions as well as, again,
20 those four building blocks that were included
21 in the plan.

22 PJM will have that analysis
23 finished prior to mid October so it can serve
24 as input for the comments on the Clean Power
25 Plan that are due by October 18th.

1 It's important to recognize that
2 PJM does not take a position on the policy
3 issues involved with and represented by the
4 Clean Power Plan. Again, PJM believes that we
5 can play a support role for our states in
6 analyzing the implications the plan and what
7 the plan will mean for each of our states.

8 PJM will be submitting comments to
9 the EPA by the comment deadline in mid
10 October, and a primary focus of those comments
11 will be PJM -- will be PJM's continued advocacy
12 for a reliability safety valve, such that PJM
13 can continue and will continue to perform its
14 primary mission of maintaining the reliability
15 of the bulk power grid.

16 So, in closing, PJM, again, is
17 offering itself as a resource to the states in
18 our region in their evaluation of the clean
19 Power Plan. And we hope that the analysis
20 that we are embarking on and will perform for
21 the states will help them identify and
22 evaluate the optionality and flexibility
23 available to them under the Clean Power Plan.

24 Again, PJM is not attempting to
25 insert itself into Pennsylvania's state

1 implementation plan development, but, again,
2 rather offers itself as a resource to the
3 state and all the states in our region such
4 that PJM can continue to perform our primary
5 mandate and keep the lights on for all the
6 states in our region.

7 So, with those brief comments,
8 I'll be happy to take any questions you might
9 have for me this morning.

10 Thank you, again, Mr. Chairman.

11 MAJORITY CHAIRMAN MILLER: Thank
12 you, Mr. Bresler.

13 I guess, I would have a question.
14 As I have studied the grid all across the
15 United States and looked at several different
16 issues, one of my concerns has always been is,
17 you know, Pennsylvania, is basically an
18 exporter of electricity. We produce all we
19 need and supply many others.

20 As we begin to shift the
21 generation of electricity, are the other
22 states going to pick up their share? Do we
23 continue to be an exporter? Does it matter to
24 the grid at all?

25 MR. BRESLER: Well, again, PJM's

1 primary responsibility is for the region that
2 we serve and ensuring resource adequacy for
3 the region that we serve. We do have,
4 actually, resources outside of PJM that are
5 committed to PJM's resource adequacy needs.
6 So, while we do have exports from PJM, we also
7 have imports into PJM from outside of the
8 region. And really, again, PJM will continue
9 to ensure that its primary focus is ensuring
10 the reliability of the region that we serve,
11 whether states outside of PJM will rely on
12 coordination with PJM states in order to meet
13 the mandate of the CPP and the eventual final
14 rule will play a role in that evaluation.

15 But, again, PJM will incorporate
16 that in our analysis to ensure that we
17 maintain the reliability for our region.

18 MAJORITY CHAIRMAN MILLER: Thank
19 you.

20 Representative Evankovich.

21 REPRESENTATIVE EVANKOVICH: Thank
22 you, Mr. Chairman.

23 Thank you for your testimony. I'm
24 always impressed by what PJM does, how they
25 manage the grid.

1 My question is very simple, and
2 that is, you said your stated mission is to
3 keep the lights on, keep the grid
4 functioning. If we take Mr. Pippy's testimony
5 as accurate, that if the rules, as presented,
6 went through, that we would have to -- we
7 would mandate the closure of several coal-
8 fired power plants, can you talk about -- I
9 know you're doing a full analysis. I'm not
10 asking for tremendous detail. If that were
11 the case, and if it were the case in the
12 winter or the summertime where one, two
13 coal-fired power plants shut down, let alone
14 all of them, what would the impact be to your
15 stated mission of keeping the lights on?

16 MR. BRESLER: Well, again, PJM's
17 role is to sort of incorporate the
18 implications, if you will, of the policy
19 decisions that are made. So, we will need to
20 make sure that we incorporate any of those
21 closures into our planning for the future.
22 But, again, PJM, our role is not to mandate
23 the construction of generation. Our role is
24 we can order the construction of transmission
25 facilities to ensure that the generation that

1 is produced can reach the loads. But we will
2 make sure that we conduct adequate evaluation,
3 so that looking years into the future, we can
4 anticipate the impacts of any closures that do
5 result from these --

6 REPRESENTATIVE EVANKOVICH: With
7 all due respect, Mr. Bresler, my question was,
8 if those closures happen, what would the
9 impact to the grid be. What would the impact
10 to your stated mission be? Would you be able
11 to keep the lights on?

12 MR. BRESLER: Well, again, we
13 can't mandate the construction of generation.
14 So, we will -- we will make sure everyone is
15 aware of what those implications are. Right
16 now, we have a reserve margin that is
17 available to us over and above our required
18 reserve margin. So, in other words, three
19 years into the future we've cleared
20 approximately 20 percent reserves. Our
21 required reserve margin is between 15 and a
22 half and 16 percent, depending on the year.
23 So, yes, the answer is we could withstand
24 closure, even without replacing it up to a
25 point. At some point, though, we will need to

1 ensure that replacements do exist, and that is
2 the purpose of the RPM, the reliability
3 pricing model construct that we operate, to
4 ensure that replacements are procured when
5 retirements do occur.

6 MAJORITY CHAIRMAN MILLER:

7 Representative Snyder.

8 REPRESENTATIVE SNYDER: Thank you,
9 Mr. Chairman.

10 To follow up on Representative
11 Evankovich just a little bit. Do you think
12 companies should have to go through a more
13 stringent review before they tell you they're
14 going to close a power plant? Or do you think
15 your 90-day process is sufficient?

16 MR. BRESLER: Well, when we do
17 issue retirement requests, there is a review
18 that is conducted by the independent market
19 monitor for the PJM region to ensure that that
20 retirement request, in effect, is not an
21 exercise of market power. In other words, to
22 ensure that the economics actually
23 substantiate the requested retirement and that
24 the retirement is not an effort to raise the
25 prices for other generators in that same

1 owner's fleet. So, I would say that that
2 analysis is already -- is already part of the
3 PJM rules and is already conducted by that
4 independent market monitor when we receive a
5 retirement request.

6 REPRESENTATIVE SNYDER: Okay.
7 Because my concern is, I had a power plant go
8 offline last year, you know, and it closed 90
9 days from the day the company announced, but
10 the first 30-day assessment from PJM was that
11 it would impact the reliability of the grid.
12 And then 30 days later, it wasn't going to
13 impact the reliability of the grid.

14 To go to Mr. Pippy's testimony,
15 what Representative Evankovich, I think, was
16 getting at, if we comply with the EPA rules
17 and coal becomes dead, how are you going to
18 maintain the grid?

19 MR. BRESLER: Well, again, this is
20 why we will advocate in our comments to the
21 EPA for that reliability safety valve, so that
22 if we do see reliability problems that are
23 caused by retirement requests that we receive,
24 whether they are stimulated by this plan or by
25 anything else, that we can maintain the

1 reliability of the system by maintaining the
2 operation of resources we need to maintain
3 that reliability until sufficient transmission
4 reinforcements can be constructed.

5 REPRESENTATIVE SNYDER: You know
6 what, you had reliability issues last winter
7 during the polar vortex, after a couple of
8 coal-fired power plants went off line. So, I
9 am deeply concerned about what's going to
10 happen to the reliability and also to the cost
11 of electric bills.

12 And I just have one final
13 question, Mr. Chairman.

14 How is PJM funded?

15 MR. BRESLER: PJM is funded by our
16 members. So, our members --

17 REPRESENTATIVE SNYDER: It's a
18 member-driven organization.

19 MR. BRESLER: That's correct.

20 REPRESENTATIVE SNYDER: Thank you.

21 Thank you, Mr. Chairman.

22 MAJORITY CHAIRMAN MILLER:

23 Representative Vitali.

24 MINORITY CHAIRMAN VITALI: Couple
25 of points and questions.

1 As I recall, to get to that 30
2 percent reduction, under the proposed EPA
3 rule, I think we have 15 years to get there.
4 So, I think that gives us some time to make
5 adjustments.

6 But I wanted to get back to the
7 issue of the required reserve margin, the
8 actual reserve margin PJM has, and how that
9 relates to the polar vortex. I was having a
10 conversation with John Hanger, former PUC
11 member and DEP person, and he was suggesting
12 that our reserve margin is more than
13 adequate. He was making your point. We have,
14 in our system, the capacity to generate
15 electricity beyond what we need. And we could
16 even have more but the -- and totally
17 eliminated any chance of ever running out of
18 power, but the problem is, the higher your
19 reserve margin, the more you pay for it, the
20 more ratepayers, the more every citizen of
21 Pennsylvania on their bill pays for these
22 reserve margins.

23 So, when my -- just comment on
24 this. So, with regard to this, some of the
25 problems we had in that cold winter, when you

1 have extreme circumstances, those happen, you
2 can guard against every possible eventuality,
3 but that just costs every citizen in
4 Pennsylvania more. Just -- talk to me a
5 little bit about that issue.

6 MR. BRESLER: I think you hit the
7 nail on the head, Mr. Chairman. It's a
8 balancing act. So, yes, we could commit many
9 more reserves than we commit for today as far
10 as the resources we have to maintain resource
11 adequacy, but there is a cost to that, and the
12 cost has to eventually be paid by the
13 ratepayers in the entire region.

14 So, PJM, as part of this mandate,
15 conducts a reliability analysis every year and
16 determines what we call the "installed reserve
17 margin," which is the IRM, which is based upon
18 average generator forced outage rates, average
19 load forecast error, and the load forecasts
20 that we see years into the future, and we
21 commit resources at a minimum on the basis of
22 that installed reserve margin.

23 The polar vortex, and really the
24 entire month of January, was an extremely
25 challenging set of operational circumstances.

1 We not only saw loads in excess of what would
2 typically be forecast for a January winter
3 period, because of the extreme cold weather.
4 We also saw forced outage rates, so forced
5 outages of generators for many reasons, that
6 were in excess of three times what you would
7 see on average.

8 So, the combination of all those
9 factors led to the challenging operational
10 circumstances, and I would simply point out
11 that even given all those challenges, we were
12 still able to keep the lights on successfully.

13 MINORITY CHAIRMAN VITALI: Thank
14 you.

15 MAJORITY CHAIRMAN MILLER:
16 Representative Gabler.

17 REPRESENTATIVE GABLER: Thank you
18 very much, Mr. Chairman.

19 And thank you for the testimony
20 and for enlightening us with discussion about
21 how the grid factors into all this. But, I
22 think, in going back to Chairman Vitali's
23 question about the cost of reserves, I think
24 it's also important to talk about the cost of
25 base load. I've had the opportunity to have

1 numerous conversations with representatives
2 from PJM, and I've got a rudimentary
3 understanding of locational marginal pricing.
4 And the idea of locational marginal pricing is
5 that the cost of power is based on how much it
6 costs to bring the next piece of capacity onto
7 the grid and to get it to the location where
8 the power's demanded. Is that pretty close?

9 MR. BRESLER: Pretty close.

10 REPRESENTATIVE GABLER: And so, I
11 wonder if you could just talk to us a little
12 bit about the cost to the base load and why
13 coal is 40 percent of your power generation.
14 I think that, you know, in -- it's important
15 to talk in the balancing act about the fact
16 that, yes, reserves have costs, but also
17 replacing base load has costs.

18 And so, what would be the impact
19 on the consumer with the locational marginal
20 pricing if coal were removed from our base
21 load?

22 MR. BRESLER: There's a lot in
23 that question. Sorry.

24 But the reason why coal has
25 historically been 40 percent or so of the

1 energy produced in the PJM region is because
2 PJM dispatches based on the least costs,
3 security constraint economic dispatch. And,
4 historically, coal, as a fuel for generation
5 has been one of the cheapest on the system.
6 And so, when coal is available, historically,
7 it was dispatched.

8 We did see the dispatch stack
9 reverse somewhat very briefly back in 2009,
10 when natural gas prices were at their very
11 lowest. And given natural gas prices have
12 stayed relatively low, there has been
13 increasing competition between primarily coal
14 and natural gas resources among the fuel mix
15 in PJM.

16 But the marginal cost of operation
17 is what is reflected through the energy
18 prices, which is LMP, locational marginal
19 pricing, as you pointed out. When it comes to
20 replacing the sources, really now what you're
21 into is the capacity costs, which are sort of
22 separate from the actual energy production,
23 and are revealed through the reliability
24 pricing model, prices that come out from those
25 capacity auctions on into the future. But the

1 principle is the same.

2 And as the cost of compliance for
3 resources that are affected by the
4 environmental regulations that have been
5 promulgated by the policy makers, as those
6 costs of compliance are incorporated into the
7 capacity auctions, the capacity auction
8 reveals the least cost mix of generation
9 that's available to serve the capacity needs,
10 again, years in the future.

11 And so, as we need to -- or as
12 retirements take place or as capacity costs
13 increase for certain resources that are
14 replaced by other resources, the capacity
15 costs will change as a result, and those
16 capacity costs typically are between 10 to 15
17 percent of a retail customer's bill.

18 So, I hope that gives you at least
19 some insight as to how they work together.

20 REPRESENTATIVE GABLER: I
21 appreciate it. And I thank you.

22 And I just think, obviously, we
23 face a lot of difficult choices about, you
24 know, how we manage our load, going forward,
25 how we do so in an environmentally responsible

1 way, but I think it's important that we always
2 remember that balancing act, both on the
3 capacity side as well as on the base load
4 side. That if we continue to make changes to
5 our system that does take certain power plants
6 offline, we're going to get further into what
7 I think you referred to as the dispatch stack,
8 which means we're going to be dispatching
9 higher cost alternatives, which is going to be
10 reflected in ratepayers' bills ultimately.

11 So, I appreciate the education,
12 and I thank you for what you do. Appreciate
13 it.

14 MAJORITY CHAIRMAN MILLER: Thank
15 you.

16 Final question, Representative
17 McCarter.

18 REPRESENTATIVE MCCARTER: Thank
19 you, Mr. Chairman.

20 Just a real brief question. What
21 is the percentage of backup reserve capacity
22 right now that PJM maintains?

23 MR. BRESLER: If you compare the
24 total capacity available right now to the
25 summer peak anticipated load, we have

1 somewhere right around a 20 or 21 percent
2 reserve margin.

3 REPRESENTATIVE MCCARTER: So,
4 approximately 20 percent. And how does that
5 play out in terms of the winter also?

6 MR. BRESLER: Well, the winter
7 peak in PJM is lower than the summer peak.
8 This year, they were actually close because we
9 had such a high winter peak and such a low
10 summer peak. But we are a summer peaking
11 region. And so, typically winter reserves are
12 in the 35 to 37 percent range, if you compare
13 the total capability to the anticipated winter
14 peak.

15 REPRESENTATIVE MCCARTER: And that
16 is the capacity that is within -- purely
17 within the PJM system; is that correct?

18 MR. BRESLER: It does --

19 REPRESENTATIVE MCCARTER: Or does
20 that also include outside the system?

21 MR. BRESLER: It includes any
22 resources outside the system that are
23 committed to serving the PJM load because they
24 have committed themselves as PJM capacity
25 resources.

1 REPRESENTATIVE MCCARTER: Okay.

2 Thank you.

3 MR. BRESLER: Sure.

4 MAJORITY CHAIRMAN MILLER: Thank
5 you for your testimony, Mr. Bresler. Thank
6 you for being with us today.

7 Next up, we will hear from Jake
8 Smeltz, president, Electric Power Generation
9 Association.

10 Good morning, Jake.

11 MR. SMELTZ: Good morning.

12 Welcome back to Harrisburg.

13 First of all, let me just say, I,
14 on behalf of my members, am very, very pleased
15 that the committee is taking a good look at a
16 very important issue. Nothing in my time at
17 EPGA will be more substantive in terms of what
18 resources are here and what consumers pay for
19 those resources as this particular rule.

20 Now, before I get into the new
21 greenhouse gas rule, what I'd like to do is
22 walk through a little bit about what's already
23 been happening in the system, so you have a
24 sense of sort of what's been going on, some of
25 the challenges that my members have had here

1 in the past number of years, because context
2 is important.

3 And you'll hear me say -- I've got
4 a number of slides. I'm going to move quickly
5 because I understand, you know, time
6 constraints. So, we'll move as quickly as we
7 can and certainly be available for questions.
8 We're right across the street every day, so if
9 you have any further questions, you're welcome
10 to call.

11 Next slide. We are based here in
12 Harrisburg, regionally focused. Those are
13 some of my fine member companies that work
14 very hard every day to produce electricity
15 reliably, economically, and perhaps most
16 importantly, very safely.

17 Next slide. You've heard me say
18 this before. We're the Keystone State of
19 electric power production. We have the four
20 things you need to make electric and make it
21 well. We have, obviously, generation, but we
22 have land. We have fuel. We have water. And
23 we have transmission. All those things make
24 Pennsylvania an extraordinarily important
25 state in electric power production.

1 Next slide. We are number two in
2 power production. Only Texas makes more
3 electricity. We're the number one exporter.
4 We are home to one of the most diverse and
5 reliable fleets. And we inject billions of
6 dollars into Pennsylvania's economy each
7 year.

8 Next slide, which is very
9 difficult to see here. But about every year
10 we add or, give or take, around 15 billion
11 dollars into Pennsylvania's economy. So, this
12 is an important industry for the state. It's
13 important for our fuel suppliers. It's
14 important for the hard working men and women
15 that go to the plants each day, and it's very
16 important to the consumers who benefit from
17 the work that we do on an economic basis.

18 Next slide. We had talked a
19 little bit -- and I apologize. You all have
20 copies, paper copies in front of you. But,
21 you know, the installed capacity is an
22 important issue because it gives us a sense of
23 what's been happening. These are numbers from
24 2013. And you'll see gas is around 28
25 percent. Coal is in the mid 30s. Nuclear is

1 hovered around 25 percent. The important
2 point of this slide is the reduction of the
3 coal capacity which has occurred over the past
4 number of years.

5 When I began at EPGA about five
6 years ago, that number was close to 50
7 percent. So, you have to appreciate what's
8 been happening over the past number of years,
9 because that may give us an illustration of
10 what could happen going forward.

11 Next slide. You may be interested
12 to know that we are not just retiring plants,
13 we're building plants. And that's important.
14 Pennsylvania remains a very attractive state
15 to build and own and operate generation.
16 These are some of the sort of high level
17 figures about what is currently in the queue.

18 Next slide. And this gives you a
19 sense of what those project are, almost
20 exclusively natural gas. That shouldn't
21 surprise anyone here. It's a very competitive
22 commodity. We can build a plant in, give or
23 take, around two years. And it's easier to
24 perform with in terms of environmental
25 requirements. So, all of those things have

1 natural gas sort of, you know, we're hitting
2 the accelerator on building natural gas, and
3 that's really what's coming.

4 Next slide. Now, I titled this
5 Major Environmental Rules have been changing
6 the Landscape because it's true. We're here
7 talking about, you know one rule that
8 promulgated this year. My member companies
9 are operating with rules that have promulgated
10 over the past number of years. And I think
11 that that's important for this committee to
12 understand. We are in the process of
13 implementing what is known as the MATS Rule,
14 the Mercury and Air Toxics Rule. We have the
15 SCAPR Rule, which is the Cross State Air
16 Pollution Rule. The U.S. Supreme Court
17 recently ruled that EPA had the authority to
18 implement that rule, so we expect that the --
19 particularly the NOx components of that rule
20 are going to be implemented here very
21 shortly.

22 We have the 316(b) Water Intake
23 Rule, which affects every power plant in the
24 state, not just coal. We have the regulation
25 of coal combustion residuals, or coal ash,

1 still dangling. If the EPA determines that's
2 a hazardous waste, that could be a crippling
3 blow to the use -- the beneficial use of that
4 commodity.

5 We have the new effluent
6 limitation guidelines. These are the water
7 quality rules that have just been
8 promulgated. PA Regional Haze. We have our
9 NOx RACT rule, which is a DEP-driven rule.
10 That's out for comment right now.

11 My personal favorite, the use of
12 behind-the-meter generators and the impact
13 they have on air quality. And, of course, the
14 predecessor rule to the current rule, which
15 was the greenhouse gas rule for new power
16 plants.

17 Now, when you take a look at this
18 next slide is actually one -- and I want to
19 give credit to the Sierra Club for this. They
20 actually timelined all of the implementation
21 requirements for these various rules. And I
22 think that any reasonable person would agree
23 that this is, you know, an extraordinarily
24 complex and challenging set of rules that
25 would have to be met in the timeline that is

1 outlined before you.

2 And so, as we talk about the
3 power -- the new greenhouse gas rule today, we
4 have to consider what's already happening in
5 the system. The next slide indicates the
6 costs associated with these rules that I just
7 discussed, and, again, this came from a Sierra
8 Club presentation. These aren't my numbers.

9 When you can see that these
10 numbers are reflected in megawatt per hour
11 costs, you can see very quickly why the
12 dynamics of coal have become uneconomic in
13 some instances. When you have to absorb the
14 ongoing costs of regulation, this is where
15 those costs show up.

16 And next slide. So, what has been
17 happening in terms of emissions across the
18 state, we've seen SO₂ be reduced considerably.
19 NO_x was coming down about 42 percent.
20 Particular matter, as measured by PM 10, about
21 75 percent. These are success stories that
22 the state should celebrate. These are not
23 failures of our industry to not respond to
24 environmental rules. This is what you would
25 expect when you look at the slide two previous

1 slides before, when you talk about the types
2 of environmental rules that have been coming
3 forward.

4 The next rule or -- sorry. The
5 next slide is sort of the latest rule. So,
6 you know, I know that's the subject of today's
7 hearing, and I'd like to talk about it sort of
8 in a bar level. What is particularly unique
9 to this rule is the speed at which it was
10 developed and the speed at which it will be
11 implemented, given its scope.

12 It began by action of our
13 President. EPA was directed to develop a
14 rule. It published that rule in early June,
15 signed in early June. You can see there is an
16 illustration of the rule in chief, well over
17 600 pages.

18 It requires national reductions,
19 individual state reductions, significant
20 reductions must begin by 2020. States are
21 going to have the opportunity to develop their
22 own plan, or if we would so choose, we could
23 work with other states.

24 Next slide. So, this is sort of
25 an initial reaction from the industry as a

1 whole. And I want to characterize this
2 reaction as an overall reaction. There are
3 individual companies which would benefit from
4 the rule. There are individual companies
5 which would, you know, be economically harmed
6 by the rule. So, within my own association,
7 there's a different -- there are different
8 viewpoints, and it's important to understand
9 that.

10 But I think that every resource in
11 the power sector's affected. So, the rule, as
12 a whole, is important to the industry and
13 certainly to Pennsylvania, which is home to
14 all these resources.

15 We would like to give credit to
16 EPA. They did reach out, and they attempted
17 to understand what was happening in the power
18 sector. They wanted to understand the
19 competitive market construct. And they
20 reacted to two things that we specifically
21 requested. We said, we cannot do what you're
22 asking us to do, quote, unquote, inside the
23 fence. We can't do at the power plant level
24 what you ultimately want to do, because
25 there's no technology to achieve what you want

1 to do inside the fence. So, we asked for more
2 than one compliance path.

3 We also asked that the states be
4 in the driver's seat. Pennsylvania will be
5 disproportionately impacted because we are
6 such a large producing state. We export
7 electricity. So, at the end of the day, we
8 believe that Pennsylvania should be in the
9 position to make the types of choice about how
10 to manage the rule and that that should not be
11 federally driven.

12 Now, what are some of the things
13 we're a little bit concerned about? We're
14 concerned that these targets that were
15 developed -- okay, approach is appropriate.
16 But now we're talking about what are actually
17 the goals. The goals may be a little too
18 aggressive. When we look at what is being
19 asked of the state, and we consider that over
20 the term of the program, we are concerned that
21 that may, in fact, be a little bit too much
22 too quickly.

23 We create distortions in the
24 system when we make such wholesale changes so
25 quickly. And we don't want that to result in

1 unintended consequences with the power system.

2 Now, you heard from PJM. Very
3 capable folks. They do their job
4 extraordinarily well. Look, there won't be
5 problems. That is always the hope. The
6 reality is that resources that may produce --
7 all produce a megawatt hour of electricity
8 don't do that the same way. And when you make
9 changes in what resources are producing, that
10 may result in unintended consequences. I'll
11 talk a little bit more about that in a few
12 minutes.

13 We believe that there is
14 flexibility under the rule, but when you look
15 at the targets that are set, that
16 flexibility's severely limited because there
17 really is only one path to take. You may have
18 four, quote, unquote, building blocks, but
19 when you have no choice but to use every
20 single building block, how much flexibility
21 really is there?

22 We believe that -- and you've
23 heard a little bit about this from Senator
24 Pippy. The reality is that, when you look at
25 how EPA calculated the goals and which, quote,

1 unquote, baselines were used, they represent
2 that they're using a 2005 baseline, but what
3 they've done is, they've actually calculated
4 some of this off of a 2012 figure, and so,
5 while we, quote, unquote, get credit for what
6 we've done, that credit has already been
7 factored in, and so, at the end of the day,
8 the new requirements don't include the
9 credit. The credit was based on what was
10 already done.

11 Now, when you look at specifically
12 its power plant level, at the heat rate
13 requirements, when I polled my member
14 companies, they told me that the requirements
15 in terms of efficiency improvements at the
16 plants was problematic. These are folks that
17 every day seek to find an advantage to do
18 their job better. That's in their economic
19 interest.

20 Many of the improvements that EPA
21 believes can happen have already happened.
22 And so, the question is, if you can't do more
23 with what you have, what will you do? And,
24 overall, I think it's been said, and it's a
25 fair point, that when you look at the overall

1 reductions to greenhouse gas pursuant to this
2 rule, that at the end of the day, I think that
3 most people would characterize those as minor
4 reductions as compared to what's happened on a
5 global sense.

6 I'm not saying that it's
7 inappropriate. I'm simply suggesting it be
8 put in context.

9 Next slide. So, what does this
10 mean? It means that the state of Pennsylvania
11 can write its compliance plan based on these
12 building blocks. The first one being, we're
13 going to make the plants today work better.
14 That's a good idea.

15 Now, the problem with this
16 particular component is that there's a
17 presumption that's made. And the presumption
18 is that there would be available capital to
19 the people who -- or to the companies that own
20 and operate the plants to actually make the
21 improvements. If they don't have the money to
22 make the improvements, the improvements won't
23 be made. Unlike regulated states, we're not
24 going to go back to ratepayers and say, You're
25 going to have to help pay for this. If they

1 can't make it economic in a competitive
2 market, then it won't be done.

3 The second building block used
4 more lower-emitting sources. This is what I
5 refer to as the gas dispatch provision.
6 You've heard a little bit about this. EPA
7 would like to, essentially, run gas plants
8 about twice as much. Now, that is -- that's
9 something that I think we all need to consider
10 in terms of our ability to actually achieve
11 that result.

12 If you look at a capacity factor
13 or the availability of a gas plant today, and
14 you look at what EPA's requiring that those
15 plants do, I think that that raises some
16 important questions. Most of our natural gas
17 plants don't have what we call for them in
18 transmission, which means that they're
19 guaranteed delivery of commodity. This became
20 an important issue in January, during the
21 vortex, when plants weren't what we call
22 curtailed, or taken offline, because that
23 natural gas needed to available for home
24 heating use.

25 If you require them to have those

1 particular requirements, the price of that
2 commodity will go up. If we're going to use
3 natural gas plants more, we're going to have
4 -- have the necessity for more infrastructure.
5 So, I'm sure this committee is well aware of
6 the types of challenges that come with
7 building more pipelines.

8 All of these things are probably
9 going to be necessitated because we're going
10 to run these resources more.

11 The third component, use lower-
12 emitting sources, this is a renewable option.
13 Renewables are a technology which is greatly
14 developing. That's been done not just through
15 our 2004 law, but as a matter of economics.
16 They're finding ways to do all these things
17 better. And I think that's actually a real
18 good thing.

19 One thing, with this particular
20 provision, when you invite or, in this case,
21 require more intermittent resources to come
22 into the system, these folks don't produce on
23 demand; they have to produce when their
24 resource is available -- their fuel resource,
25 sun, wind, whatever -- that you're going to

1 have to manage the increased variability which
2 comes from, now, the supply side. Variability
3 used to be a demand-side construct. Six
4 o'clock at night, demand goes up; 6 o'clock in
5 the morning, demand goes up; 2 o'clock in the
6 afternoon, demand goes down. Now, we're going
7 to have to manage additional variability on
8 the supply side. Resources will only be
9 available when their fuel source is available,
10 so you're going to have to have resources that
11 -- I use the term "dance" or be available to
12 work with those renewables. That would most
13 likely be natural gas.

14 And then, the fourth building
15 block is energy efficiency, demand response.
16 Pennsylvania is well aware of how that works
17 through our Act 129 program. And, you know,
18 the idea being that the cheapest and most
19 environmentally friendly electron is the one
20 that is produced.

21 So, certainly, we could, if we so
22 chose, we could work with other states, and
23 that may be a good idea, particularly because
24 our surrounding states are net importers.

25 Next slide. So, to sort of break

1 that down, these are the -- you can see these
2 are the inside-the-fence compliance options.
3 Find greater efficiencies that was referenced
4 as concept and new source review. I'm not
5 going to get into that, but the bottom line
6 is, if we make substantive changes at the
7 plants, additional environmental requirements
8 then become applicable to us, and that becomes
9 an economic issue as well.

10 Certainly plants could either
11 co-fire or switch fuel sources. Many --
12 several power plants in the state of
13 Pennsylvania, particularly coal-fired units,
14 have decided to do that. When the economics
15 work, they will do it. And when the economics
16 don't work, the plants will sit and wait for
17 future use.

18 Next slide. Now, when you look at
19 EPA's rule, you can see here that there are
20 lots of options if you want to go beyond the
21 fence line. And that's what makes this rule
22 particularly unique. We're not regulating
23 constituent pollutants out the smokestacks
24 only with this rule. EPA is now reaching
25 beyond what happens at the power plant, and it

1 is getting into areas that go beyond what has
2 traditionally been an environmental regulatory
3 scope.

4 So, here you have demand side
5 efficiencies, renewables, transmission
6 upgrades, energy storage, expansion of nuclear
7 energy -- which I think is a good idea --
8 market-based trading programs, and other
9 energy conservation. This is well beyond what
10 EPA has traditionally done or, quite frankly,
11 any other environmental agency.

12 Next slide. So, I talk about this
13 system in that it's already in a significant
14 state of transition. And, you know, natural
15 gas has been the game changer. I spoke about
16 that. We've seen the decline in coal. I
17 spoke about that.

18 I want to talk a little bit about
19 the nuclear issue and our availability of our
20 nuclear capacity. We're the second largest
21 state in terms of nuclear capacity. Only
22 Illinois has more nuclear capacity than we do.
23 So, this is important to the state of
24 Pennsylvania.

25 And the reason that I raise this

1 is because in order for EPA's plan to work
2 properly, it necessitates that our nuclear
3 resources stay on line and, in some respects,
4 grow. Now, that is important because we've
5 had several base load nuclear plants not clear
6 the base residual option, or that RPM option,
7 that PJM just talked about. And so, they're
8 not getting the reliability revenue stream
9 that PJM just discussed and which several
10 representatives remarked was so important.

11 So, what could this mean? Well,
12 it could certainly mean that those particular
13 power plants -- none of which are in the state
14 of Pennsylvania, by the way, but are in PJM,
15 some -- at the end of the day, those plants
16 could be candidates for decommissioning. If
17 they can't get the money to recover their
18 costs of operation, they won't continue to
19 operate. EPA insists that those plants
20 continue to operate or we can't meet the
21 goal.

22 So, you know, that's why this EPA
23 plan is much bigger than just about what's
24 happening in a particular coal facility. It
25 also, because of the pressures it brings on --

1 and necessities it imposes on the other
2 resources, it sort of brings all of the
3 industry into the discussion.

4 So, I want to bring that to your
5 attention, because that's a very important
6 point to make. Just because a plant is
7 licensed through 2030 doesn't mean it will
8 operate through 2030.

9 Demand-side response and energy
10 efficiency, you've heard me say previously
11 that they've dominated the system.

12 We talked a little bit about
13 reserve margin. One question that was not
14 asked about the reserve margin: How much of
15 the reserve margin is actual generation? How
16 much of that additional, quote, unquote,
17 capacity is iron in the ground that can
18 produce electrons when you need it to? That's
19 a great follow-up question.

20 The wholesale markets continue to
21 be skewed, and, again, PJM operates -- they
22 call that sort of like the stock market. The
23 reason that I raise this is because we depend
24 on that market to draw revenue in order to
25 operate. And if that market isn't functioning

1 properly, it will distort the prices and the
2 price signals, so it could prevent things from
3 being built that should be built. It could
4 promote the decommissioning or deactivation of
5 units that should not be deactivated or
6 decommissioned.

7 We depend on fair markets, and
8 we've had issues with PJM's markets in the
9 past several years, all sorts of things
10 happening there. I think that it's important
11 for this committee to understand that this is
12 an economically driven system. PJM is -- they
13 can use the term nondiscriminatory. I use the
14 term agnostic. They view resources exactly
15 the same. If it produces a megawatt hour, it
16 produces a megawatt hour, but we know -- you
17 know, the folks in this room know intuitively
18 that it does matter how resources produce.

19 Nuclear is a great resource. We
20 need it to remain in operation because of the
21 value that it brings.

22 Coal is a resource that creates
23 diversity opportunity. We can store its fuel
24 on site, and it can be available, you know,
25 80, 90 percent of the time.

1 Gas is a great resource because it
2 can ramp quickly, and it can dance with those
3 renewables, and it is economic. We can build
4 it quickly and achieve some of our
5 environmental goals. Renewables.

6 Renewables are a great resource
7 because they take advantage of the natural
8 value that surrounds the state of
9 Pennsylvania.

10 Demand response, energy
11 efficiency, great approaches to manage those
12 periods.

13 So, when you look at this, you
14 have to look at it as a whole, but you can't
15 have one resource dominate to the exclusion of
16 others, or you may end up with issues, which
17 is why the last -- the last issue that I raise
18 here, you know, sort of does look at the
19 vortex.

20 I want to be clear to this
21 committee. I'm not raising a reliability red
22 flag. No one's lights went out in January
23 2014, but people's bills increased. There is
24 a cost associated with the system. And that
25 cost is borne by consumers.

1 What we saw in January 2014 was a
2 performance test of this new transitioning
3 which has been in development over the past
4 period of years. And I believe that it was an
5 opportunity, and I think it's been taken that
6 way, to look at the system as a whole and to
7 determine what performed, what didn't perform
8 and why, and what other mechanisms we may need
9 in order to ensure that the resources that we
10 need are available.

11 Let's not forget, in January 2014,
12 PJM lowered the voltage across 13 states,
13 15 below with wind chill. They bought
14 emergency power from the New York ISO and the
15 and the mid west ISO. We had a 20 percent
16 reserve margin. Those are great questions
17 that were raised by the Consumer Affairs
18 Committee, you know, over that period of
19 time. And I think that they deserve at least
20 a scrutiny when you're talking about making so
21 many changes so quickly.

22 So, with that, here's a map of
23 some of the -- next slide -- the map of some
24 of the facilities that have left production.
25 Some of these may be coming back into

1 production. Like I said, some of the smaller
2 coal plants are looking at re-firing with
3 natural gas.

4 Next slide. Here is a slide that
5 actually came in PJM. This shows you what has
6 left the system over the past number of
7 years. And you get a sense of that. Coal are
8 the big black dots there.

9 And next slide. Real quickly,
10 next steps, the preliminary rules out for
11 comment. Chairman Vitali was right. This is
12 simply a proposal. We're hopeful that EPA
13 considers some of the comments that we will be
14 raising. They have reached out. We had a
15 hearing here in Pennsylvania, in Pittsburgh.
16 I talked about the speed at which the rule was
17 coming. Final rule is expected by June of
18 next year. States to be submitting their
19 plans a year after. The federal government
20 will do our plan, if we don't do one.
21 Significant reductions coming by 2020. And
22 the full goals need to be met by 2030.

23 Now -- next slide. These are
24 questions that you folks -- we encourage you
25 folks to ask. You know, what will we do in

1 implementation? How will the important
2 industries of the state be affected, including
3 coal extraction? What will happen with
4 electricity prices? They could go up, and it
5 could be for reasons that go well beyond this
6 particular rule. What will happen with our
7 system in terms of reliability? Can a
8 coal-fired generator absorb the cost and
9 continue in successful operation? Those are
10 tough choices that have to be made.

11 What other economic impacts will
12 result? Electricity is a commodity. We all
13 need to live. The commercial and industrial
14 sectors of our economy depend heavily upon a
15 competitive price for electric. Those prices
16 will be reflected in the goods and services
17 that people buy.

18 What will our bulk system look
19 like? What resources will we be more
20 dependent on? Will we get what EPA has
21 promised in terms of results? And we are,
22 generally, sort of the first people to put our
23 foot in the environmental regulatory water.
24 What other sources will be regulated once
25 EGUs, electric generating units, are

1 regulated? So, those are important rules.

2 And probably the most informative
3 slide I'm going to give you today is the last
4 one. There is really one undeniable
5 conclusion. This will be debated for many
6 years to come. If you take EPA at its word,
7 we're going to save billions of dollars.
8 We're going to make a lot of people healthier,
9 and we're going to save a lot of lives. If
10 you take some other folks at their word, this
11 will be economically catastrophic. It will
12 cost the economy billions of dollars, and we
13 are going to really saddle consumers with
14 higher costs.

15 And so, I know that these are
16 tough issues. I don't want to take up more of
17 your time. I probably went over my time. I
18 apologize. I'm always happy to meet with you
19 folks anytime you want to. And I want to,
20 again, say thank you for taking the time to
21 give a spotlight on a very important issue
22 that's going to greatly affect the state of
23 Pennsylvania.

24 MAJORITY CHAIRMAN MILLER: Thank
25 you, Mr. Smeltz. I might disagree and suggest

1 maybe the first slide, where it showed coal,
2 nuclear, gas, wind, solar, hydro, and pump
3 hydro storage as the most important slide
4 based on what you just told us, because of the
5 fact -- and this is what has been my concern
6 with the reliability of the grid for years
7 now -- is coal, nuclear and pump storage hydro
8 are the only energy source right now that do
9 have fuel supply reliability. All the others
10 are very, very variable and subject to, as you
11 noted during the polar vortex, we curtailed
12 gas usage to certain places because we wanted
13 to supply it, perhaps properly, to our schools
14 and our hospitals. But in the future, we may
15 have to decide that we need our electricity
16 more than we need the kids to go to school.
17 It's a very interesting thing with the fuel
18 supply that has me concerned. So, that's been
19 my concern all along. So, I think it was a
20 great presentation.

21 Maybe one question, but we do need
22 to move on. Okay.

23 Jake -- Eli.

24 REPRESENTATIVE EVANKOVICH:

25 Mr. Chairman, you've been so generous with

1 your time, and I've asked so many questions.

2 I'll defer.

3 MAJORITY CHAIRMAN MILLER:

4 Representative Rapp. Apologize.

5 REPRESENTATIVE RAPP: Thank you,

6 Mr. Chairman.

7 Briefly, you brought up hydro
8 power. And the hydro power plant in the slide
9 is in the district that I represent. Does the
10 geography of Pennsylvania not allow for more
11 hydro plants like the one in Warren County,
12 Seneca?

13 MR. SMELTZ: Actually, Seneca is
14 what we call pump storage hydro. And there
15 are 23 in the nation. We're home to two of
16 them. It really depends on geography for
17 those particular sources.

18 A great example of hydro expansion
19 is the Holtwood Power Plant, which recently
20 doubled in size, down toward Lancaster
21 County. That's a great example of a company
22 taking advantage of those particular
23 resources.

24 But, you know, it's very
25 challenging to develop power supply options

1 along a, you know, major waterway. So, I'm
2 not going to say it can't happen. I've seen
3 several times where proposals have come
4 forward, but, you know, it's pretty tough,
5 particularly because you can't get the
6 economics only because of the size of the
7 plant itself. You can't recover your costs by
8 production of more electricity just because
9 the size tends to be fairly limited.

10 MAJORITY CHAIRMAN MILLER: Thank
11 you, Mr. Smeltz.

12 MR. SMELTZ: Thank you.

13 MAJORITY CHAIRMAN MILLER: Next,
14 we have with us, we welcome Christine Simeone,
15 the director of PennFuture Energy Center,

16 Welcome, Miss Simeone.

17 MS. SIMEONE: Hi. Good morning.
18 Good morning, Chairman Miller, Chairman
19 Vitali, and the members of the Environmental
20 Resources and Energy Committee. Thank you
21 very much for having me here today. I
22 appreciate the time.

23 My name is Christina Simeone. I'm
24 the director of PennFuture's energy center.
25 PennFuture is a nonprofit environmental

1 organization working on air, land, water, and
2 energy issues that impact Pennsylvania.

3 I won't go too deeply into the
4 details of the Clean Power Plan because
5 I think they've been discussed already today.
6 What I will say is that Pennsylvania's goals
7 that were established in the proposal are
8 reasonable. They were established by looking
9 at commercially available technologies and the
10 four building blocks we discussed: energy
11 efficiency at coal plants, energy efficiency
12 at homes and businesses, increased use of
13 natural gas, and increased use of zero carbon
14 resources like nuclear and renewables.

15 If we look -- when we look at the
16 goals, you can find that Pennsylvania already
17 has a competitive advantage of meeting these
18 goals. From the 2012 baseline, our goal is
19 about a 35 percent reduction. When you look
20 at the overall national goal and you measure
21 that from the 2012 baseline, it's a 42 percent
22 reduction, so we're asked to do a little less
23 than average.

24 When you look at the increased
25 natural gas capacity that we will see from

1 coal plants that have already retired or that
2 are planned to retire, when you look at
3 existing nuclear power, our Tier 1 AEPS is at
4 8 percent, and our Act 129 rule, assuming that
5 it continues to achieve a 0.75 percent in
6 energy savings, when you bring all that
7 together, we are already halfway towards
8 meeting that goal. That means, by just -- by
9 doing nothing more than following market
10 conditions, maintaining existing policies and
11 business decisions, Pennsylvania will be more
12 than halfway there, and that's not including
13 the nuclear uprates that are planned for Peach
14 Bottom, not including any heat rate or
15 efficiency improvement at coal plants or any
16 additions to energy efficiency or renewable
17 energy.

18 EPA is taking this action because
19 it's required by law and associated settlement
20 agreements to do this work. The benefits of
21 the rule are estimated to be 55 to 93 billion
22 dollars per year, far dwarfing the costs of
23 the rule, at 7.3 billion to 8.8 billion.

24 Meanwhile, the cost of inaction is
25 too high for taxpayers. In 2012, extreme

1 weather cost every American 300 dollars, or a
2 hundred billion in total. The national flood
3 insurance program is 24 billion dollars in
4 debt. Federal crop insurance program paid
5 claims -- record claims of over 17 billion in
6 2012. And wildfire costs have tripled.

7 The White House economic advisors
8 say that every decade that we wait to address
9 climate, the costs will increase by 40
10 percent.

11 Other countries are taking action
12 on climate change, and that's good, because
13 some people believe the United States
14 shouldn't do anything unless there is a
15 global agreement. Well, China, for example,
16 has goals to reduce energy intensity by 16
17 percent, 17 percent energy reduction in carbon
18 intensity, and 11.4 percent increase in
19 nonfossil-based energy. And this is all in
20 its five-year plan.

21 In addition, they have -- in 2013,
22 they spent 61 billion dollars on clean energy,
23 while the United States spent 48 billion.

24 And the United States' action
25 really matters. It's no coincidence that

1 after our mercury rules for existing power
2 plants were established in 2011, two years
3 later, the international community came
4 together to form the Minimata Convention, to
5 reduce and limit mercury emissions. Today,
6 over 102 international governments have signed
7 on to that convention, showing the importance
8 of United States' leadership.

9 Also, the United States is
10 historically the largest contributor to the
11 climate change, enhancing the responsibility
12 that we owe to addressing this problem.

13 Carbon -- the issue of carbon
14 regulation also is not going to go away. The
15 United Nations first identified climate change
16 as being a global issue in 1979. Between 1997
17 and 2014, over 900 bills in the U.S. Congress
18 have been introduced to deal with climate
19 change.

20 In absence of congressional action
21 and coming to a political compromise on this
22 issue, EPA is being forced to take action
23 through existing law through the Clean Air
24 Act. As political debate persists on this
25 issue, addressing climate change -- the issue

1 of climate change will not go away. The
2 markets know this. The insurance industry
3 knows this. And investors know this.

4 The more we wait on making a
5 decision and moving forward, the more
6 uncertainty in the market is created, and what
7 that means is the cost of investment is higher
8 or investors will fail to invest. And this
9 does a disservice to multiple industries,
10 especially the industries in Pennsylvania, for
11 example, that stand to benefit from this
12 rule.

13 As Jake said, electricity markets
14 are in a state of transition, which heightens
15 the need to create investment certainty in
16 this issue. And it's not just coal who is
17 being affected. SNL Energy Finance showed
18 that planned retirement for noncoal
19 capacity -- so we're talking about older gas
20 plants and older oil plants -- is about 14
21 gigawatts, compared to the 27 gigawatts of
22 coal capacity that is scheduled to retire by
23 2022.

24 This is not necessarily -- the
25 phenomenon in the electricity market isn't

1 just affecting coal. It's affecting all
2 capacity that is economically at the margin.
3 As a result of this transition, again, new
4 investments need to be made. And we are not
5 doing us a service or providing any kind of
6 assistance to the investment community by
7 perpetuating uncertainty about this carbon
8 question.

9 When we talk about coal, gas is
10 not the only thing that's eroding the
11 Pennsylvania coal industry's profitability.
12 Not only is coal being outcompeted just by
13 gas, it's also being outcompeted by other --
14 other competition within the coal industry.

15 For example, the cost of mining
16 coal in the east, such as the northern
17 Appalachian region, where Pennsylvania gets
18 its coal and the western -- the central
19 Appalachian region, is far more expensive than
20 western coals. The coal mining costs for
21 northern and central Appalachia is around 70
22 dollars per short ton, that's a 2013 number.
23 Conversely, mining costs in the Powder River
24 basin out west are about 10 dollars per short
25 ton.

1 Now, in the past, that didn't
2 matter because the type of coal out west is
3 different. It's lower heat value. Some of
4 the coals out west have more sulfur. But
5 what's happening now, since many older coal
6 plants have retired -- those older coal plants
7 needed better coal to meet their emission
8 standards. Now, the more modern plants that
9 exist in the market, they have scrubbers.
10 They can utilize low value coal or higher
11 sulphur coal while still meeting their
12 emission standards and increasing
13 profitability. This coal substitutability is
14 eroding the competitive advantage that
15 northern Appalachian coal from Pennsylvania
16 once had.

17 Now, reduced coal alliance doesn't
18 necessarily mean higher prices for
19 Pennsylvania. Energy efficiency, again, is
20 our lowest cost resource. The PUC found that
21 every dollar we spend on efficiency, we get
22 three dollars back in benefits. And we have
23 the ability to cost effectively right now
24 reduce another 25 percent -- or achieve
25 another 27 percent energy savings over the

1 next ten years.

2 PJM found that we can increase
3 renewable energy from the current PJM grid
4 supply of about 2 percent to 20 or 30 percent
5 of the regional grid supply all while
6 reducing -- reducing electricity prices by 9
7 to 21 billion dollars annually, all without
8 having any negative impacts on grid
9 reliability.

10 And that gets us, again, into the
11 issue of grid reliability. Many will assert
12 that this Clean Power plan is going to lead to
13 electrical reliability issues, and they point
14 to the polar vortex as the reason -- as a kind
15 of tale for why this should be of concern.
16 But we have to remember that even with our
17 current mix of resource in the market, which
18 include coal plants, we still have problems.
19 And that's because these issues go beyond our
20 current configuration and are really related
21 to these electricity markets and transition
22 theme that everybody keeps talking about.

23 During the vortex, 34 percent of
24 the problem was because coal plants could
25 (sic) operate, 24 percent of the problem was

1 because gas plants couldn't operate. Again,
2 this is because of extreme cold temperature,
3 pipes freezing, coal freezing, et cetera.
4 Twenty-three percent of the problem was due to
5 coal -- or, I'm sorry, natural gas plant
6 interruption because they couldn't get fuel
7 supplies. The fuel was being diverted to
8 heating for homes and business.

9 PJM has performed extensive
10 analysis of these issues, and they found that
11 they have to improve coordination between
12 natural gas commodity markets and the
13 electricity system and improve the operation
14 -- winter operation preparedness for all types
15 of plants. PJM is in the early stages of
16 redefining their capacity performance product
17 to try to address this issue. Creating more
18 incentives for performance and penalties for
19 failures to perform.

20 They're also looking at the need
21 to shift that reserve margin that we talked
22 about, increase that reserve margin, so we get
23 a larger margin, so we have more resources to
24 draw from.

25 The bottom line is the PJM market

1 is dynamic. Efforts are underway to address
2 the problems that exists. And the problems
3 that exist have nothing to do with carbon
4 emissions. PJM can handle carbon compliance.
5 It will not be a problem.

6 The more fundamental issue is this
7 electricity market's in transition, and it
8 heightens the need to create investment
9 certainty so that the private sector can
10 invest and we can have business opportunities
11 grow and address any reliable issues that may
12 exist.

13 The last point I'll make is that
14 Pennsylvania is not doing enough to ensure we
15 get a positive outcome with carbon
16 implementation. PennFuture was very happy to
17 see the Pennsylvania DEP, in April, release a
18 white paper on options for complying with the
19 rule. EPA then, in June, issued its
20 proposal.

21 Later in June, DEP admitted in
22 front of the senate that its options paper,
23 its single proposal for meeting the standard,
24 would not be accepted by EPA. It was not
25 consistent with that proposal.

1 We have not seen DEP work on any
2 alternative to their options paper, and this
3 is doing a disservice to Pennsylvania. We
4 should be looking at a wide array of
5 compliance pathways and determining what is
6 best for the citizens and businesses of
7 Pennsylvania.

8 We have choices. We can either
9 continue to delay and deny perpetuating
10 investment uncertainly and stalling business
11 growth, or we can develop some compromises
12 needed to address this climate situation and
13 send some clear signals to the private sector
14 so we can invest and grow.

15 If done right, implementing EPA's
16 proposal can create jobs, reduce electricity
17 prices, and also stem the billions of dollars
18 of damages that are being created by climate
19 change. If done wrong, we'll lose jobs,
20 electricity prices will go up, but we'll still
21 avoid some of the highest costs of climate.

22 The only thing we cannot do is
23 nothing. We have to act, and we have to stop
24 delaying.

25 So, for that, thank you very

1 much. I look forward to any questions you may
2 have.

3 MAJORITY CHAIRMAN MILLER: Thank
4 you for your testimony. I believe we have a
5 few questions.

6 Chair Vitali.

7 MINORITY CHAIRMAN VITALI: Thank
8 you.

9 You know, this polar vortex from,
10 I guess, January 2014, I've heard it related
11 to Grenobles a lot. But you had mentioned in
12 your testimony something that surprised me.
13 You had mentioned that 20-plus percent were
14 due to the fact that natural gas plants
15 couldn't operate, and 20-plus percent were due
16 to the fact that coal plants couldn't
17 operate.

18 Could you thresh out that point?
19 What do you mean they couldn't operate? And
20 just put some detail to that statement, if you
21 could.

22 MS. SIMEONE: Sure. So, about --
23 during the polar vortex, about 22 percent of
24 PJM's capacity couldn't show up because of the
25 cold weather. Thirty-four percent of that was

1 due to coal plants. A lot of problems we're
2 seeing at coal plants is really being forced
3 by economic pressures. A lot of the coal
4 plants that are finding it hard to clear the
5 market may be cutting corners, reducing
6 operations and maintenance expenses, reducing
7 staffing in an effort to remain competitive in
8 the market. What we saw is, as a result of
9 some of those activities, the coal plants have
10 problems. Their equipment wasn't performing
11 as it should. Coal was freezing, which is a
12 different issue than, you know, cutting O and
13 M costs. The pipes weren't properly insulated
14 so they froze. And some of the equipment
15 wasn't well maintained and had problems.

16 Now, we saw the same thing on the
17 natural gas for a percentage -- a lower
18 percentage, about 24 percent of the gas
19 plants. And those operational issues, we
20 believe -- PJM believes can be solved by
21 creating more safeguards and requirements for
22 operational performance.

23 The other 23 percent was really
24 this fuel issue, which has to do with lack of
25 coordination between the gas commodity market

1 and the electricity market. And, again, more
2 work needs to be done on that issue.

3 MINORITY CHAIRMAN VITALI: One
4 more question. You had mentioned, due to this
5 power plant rule, there would be an
6 increase -- I think you called it economic --
7 okay. You had mentioned industry that would
8 benefit in Pennsylvania by the enactment of
9 that rule. What industries would benefit in
10 Pennsylvania from the enactment of this rule?

11 MS. SIMEONE: Well, certainly
12 energy efficiency being the most cost
13 effective option for compliance would stand to
14 gain the most. I also -- the natural gas
15 industry is probably number two on the list,
16 both through centralized stations and the
17 really interesting area of natural gas
18 distributed generation, which we could help
19 avoid some of the costliest pipeline
20 investments that are needed.

21 Then, I think, the nuclear
22 industry really has a lot to gain here. You
23 know, we've seen some upgrades at Peach
24 Bottom, and certainly what -- you know, what
25 Jake says about nuclear plants not clearing

1 the market, but that problem has really
2 perpetuated -- it's more of a problem out in
3 Illinois, but, certainly, could be an issue in
4 Pennsylvania.

5 And, you know, those nuclear
6 plants are built. They're operated in a
7 responsible manner. They provide a lot of
8 base-load power. We want to make sure that
9 they continue to provide zero-carbon power to
10 help with this issue.

11 So, I think, those are just some
12 examples -- and, obviously, renewable energy
13 as well. I think those are some examples of
14 the economic opportunities for Pennsylvania
15 industry.

16 The coal industry for a wide
17 variety of reasons, as I mentioned, not just
18 mercury, not just being inefficient and
19 outcompeted by natural gas, not just because
20 we are -- Pennsylvania's deeper coal seams are
21 more expensive to mine than the surface coal
22 out in the west, for those and a variety of
23 other issues, the coal industry is in
24 trouble. And I think the focus should be on
25 how to help the distressed communities in

1 Pennsylvania. How do we get them to take
2 advantage of opportunities in these other
3 sectors that we expect to grow?

4 MINORITY CHAIRMAN VITALI: Okay.
5 Thank you for your testimony.

6 MS. SIMEONE: Thank you.

7 MAJORITY CHAIRMAN MILLER: For the
8 rest of the presenters, we're going to
9 proceed. We've asked to be able to extend
10 past 11:00. Sometimes leadership will grant
11 that; we'll let you know.

12 But we're going to move on. Our
13 next presenter is Kevin Sunday, with the PA
14 Chamber.

15 Welcome, Kevin.

16 MR. SUNDAY: Thank you, Chairman.
17 Appreciate the invite to testify before you
18 today.

19 I realize, with the constraints of
20 time, that I will try to be brief with my
21 remarks. Thank you, again, for the
22 opportunity to discuss this important issue.

23 This is going to be arguably the
24 biggest policy decision this state has to make
25 in the coming years, once these rules are

1 finalized. And there's a host of implications
2 with them that I'd like to touch on.

3 While many of the Pennsylvania
4 Chamber's members are directly involved in
5 extracting, refining, transporting, or moving
6 energy, all of our members need energy to
7 operate, stay competitive, and keep
8 Pennsylvania's economy growing. And simply
9 put, without affordable, reliable, stable, and
10 diverse sources of energy, no business or
11 economy is going to survive.

12 Now, it's no coincidence that
13 energy prices and the unemployment rate in
14 this state have both trended downward together
15 in recent years. And we've also made a lot of
16 environmental progress while that happened.
17 The power generation sector in Pennsylvania,
18 we already heard it today, reduced their
19 greenhouse gas emissions over the past decade
20 by 14 percent. Over that same time period,
21 America led the world in reducing greenhouse
22 gas emissions, and we did that without Kyoto
23 protocols, or cap and trade, or command and
24 control regulation.

25 Industry in the state has also,

1 since 2008, reduced emissions of SO₂ by 68
2 percent, NOx by 30 percent, and VOCs by 21
3 percent. Those reductions are having a stated
4 impact on air quality. If we just look at the
5 ozone-action alerts that DEP forecasts,
6 there's only been four of those days this
7 year. Just a couple years ago, it wasn't
8 uncommon that you had several dozen.

9 EPA's proposal threatens
10 Pennsylvania's biggest competitive advantage,
11 which is low energy prices. This proposal
12 also threatens to drastically change the way
13 Pennsylvania produces and uses energy.

14 This change is likely to come at a
15 significant impact to the business community
16 as well as threaten reliability across the
17 grid. At worse, by EPA's own admission, these
18 rules will result in relatively small
19 reductions in global emissions, likely soon to
20 be eclipsed by development abroad.

21 And the reason is this. The U.S.
22 contributes just 16 percent of global
23 greenhouse gas emissions, and our power
24 generation sector is just 40 percent of that.
25 If we reduced to 30 -- if we reduced the power

1 generation's contribution by 30 percent, doing
2 some simple multiplication, global greenhouse
3 gas emissions have only gone down by 2
4 percent, in EPA's regulatory impact analysis,
5 that translates to a global cooling effect of
6 .0018 degrees Celsius.

7 We've heard from PJM this
8 morning. We've heard about the polar vortex.
9 I don't want to go over that again, it just --
10 in detail. Just, again, express our concern
11 that if we are now moving to an environment in
12 which demand peaks in the winter, not the
13 summer, and natural gas is going to have to
14 provide for both home heating and the majority
15 of power generation, we've got serious
16 questions about whether there's going to be
17 enough infrastructure in place by the time
18 these rules fully get implemented to make sure
19 that we keep the lights on.

20 We also have concerns about how
21 the energy markets are going to embrace
22 dispatch on an environmental rather than
23 economic basis without disruptions to the
24 grid.

25 There's a lot of questions about

1 how the states are going to be able to measure
2 and even comply with these goals, particularly
3 in cases where generation occurs in one state
4 but the power is being moved across interstate
5 transmission lines. What we're getting at
6 here is, the ReGGIe state. A lot of
7 proponents of these sorts of actions have
8 pointed to the regional greenhouse initiative
9 and said, well, they've been able to reduce
10 their greenhouse gas emissions; clearly,
11 there's a path forward with this. And to that
12 I would say this. It is great for states to
13 high-five each other and say that they've
14 reduced greenhouse gas emissions by shutting
15 down generation in their state and the turn
16 around and pull in electricity from out of
17 state, from Pennsylvania.

18 We're doing the heavy lifting for
19 the northeastern part of the country, and I
20 don't think that shutting down generation is
21 going to be a smart path forward.

22 We would echo the concerns by the
23 Federal Energy Regulatory Commission. They
24 were at a congressional hearing earlier this
25 summer. One of their commissioners stated

1 that this plant is, in essence, the national
2 electricity policy. FERC is the traditional
3 regulatory body that governs interstate power
4 markets. They really have not had the
5 opportunity to do a full analysis on the
6 impacts of this proposal.

7 One of their commissioners said
8 that, quote, load pockets matter because the
9 laws of physics trump written words. Just as
10 the commission does not have expertise in
11 regulating air emissions, I would not expect
12 the EPA to have expertise on the intricacies
13 of electric markets and the reliability
14 implications of transforming the electric
15 generation sector.

16 There's a lot of assumptions in
17 this rule, and I'll name those. Existing
18 plants can and will become more efficient;
19 existing and new natural gas plants can and
20 will run significantly more often; all current
21 nuclear generation can and will be relicensed
22 and operational long term; and that
23 Pennsylvania can and will deploy considerable
24 renewables assets and energy efficiency
25 measures beyond those already required by

1 law.

2 We've got concerns that we will be
3 able to implement any of these. These go far
4 beyond the traditional scope of EPA and the
5 Pennsylvania Department of Environmental
6 Protection.

7 Further, this rule expects that
8 nuclear and coal generation sources are going
9 to operate in a stop-and-start manner that
10 supports, apparently, preferred generation
11 from gas and renewables. Simply put, coal and
12 nuclear facilities are not designed to operate
13 in such a manner. Nuclear power plants cannot
14 quickly cycle online, and coal plants operate
15 much more inefficiently if they operate
16 intermittently.

17 Perversely, such a style of
18 operation would likely raise emissions from
19 coal plants on a per-kilowatt hour basis.

20 I will again quote FERC
21 commissioner Tony Clark. He said that: EPA's
22 proposed 111(d) regulations would dramatically
23 alter the traditional lines of authorities
24 between the state and federal governments by
25 creating a new paradigm of oversight of net

1 carbon emissions from the state. What was
2 once a relationship of interacting and
3 cooperating entities will be one in which
4 there is a clear senior partner.

5 What that means is that EPA is
6 taking control of a regulatory program in a
7 manner that we've never seen before. And it's
8 for that reason that we believe the sort of
9 approach outlined in a recent DEP white paper
10 that advocates for reductions inside the fence
11 is a more appropriate strategy, with outside-
12 the-fence measures being optional but not
13 mandatory. We appreciate the efforts of this
14 committee to continue working with the state
15 administration, the governor's office, and
16 congress, and appreciate all efforts to urge
17 EPA to give Pennsylvania a more realistic
18 reduction strategy, make sure we get credit
19 for what's already been done, and make sure
20 that, moving forward, all the strategies that
21 have a positive impact on emissions across the
22 state get recognized.

23 And, finally, I cannot reiterate
24 enough, we need more time to digest this
25 rule. We heard from many different state PUCs

1 and DEPs last week in congress. They're not
2 going to give substantive comment to EPA
3 because they do not have enough time to digest
4 this rule.

5 Thank you for your time. Look
6 forward to any questions you may have.

7 MAJORITY CHAIRMAN MILLER: Thank
8 you, Mr. Sunday.

9 Any other members?

10 Thank you. Thank you for your
11 testimony today. I apologize for putting you
12 under such a time constraint.

13 We have been granted an extension
14 of our time, so our next -- we want to welcome
15 Phil Smith, director of governmental affairs,
16 United Mine Workers of America.

17 Thank you for your patience,
18 Mr. Smith.

19 MR. SMITH: Thank you,
20 Mr. Chairman. It's a pleasure to be here.

21 Representative Vitali, pleasure to
22 see you again. Representative Snyder, good to
23 see you again.

24 My name is Phil Smith. I'm the
25 director of governmental affairs for the

1 United Mine Workers of America international
2 union, based in Triangle, Virginia.

3 I want to thank you for asking
4 UMWA to testify before this committee today.
5 This is an especially important issue for our
6 members, their families, and the communities
7 where they live.

8 My written testimony, which has
9 been provided to you, contains a lot of
10 information regarding our projections on the
11 impact on the coal industry, coal production,
12 and coal employment as a result of the
13 proposed Clean Power Plan rule both nationwide
14 and here in Pennsylvania.

15 I'm happy to answer any questions
16 you may have about it, but since we represent
17 people, and not markets and not rocks, I
18 wanted to spend some of my -- in fact, all of
19 my oral testimony talking about people, not
20 numbers.

21 As you probably know, more than
22 7,000 union members and their families marched
23 through the streets of Pittsburgh on July
24 31st, raising their voices in opposition to
25 this rule, while the Environmental Protection

1 Agency held public hearings and the federal
2 building there.

3 Some of them, including UMWA
4 president Cecil Roberts, secretary treasurer
5 Dan Kane, and the entire UMWA international
6 executive board were arrested as they engaged
7 in civil disobedience on the sidewalk outside
8 of that building.

9 UMWA members were joined that day
10 by members of the International Brotherhood of
11 Electrical Workers, International Brotherhood
12 of Boilermakers, utility workers, railroad
13 workers, and other workers whose jobs are
14 threatened by the EPA's proposed Clean Power
15 Plan rule. They rallied and marched in
16 Pittsburgh because they have serious concerns
17 about the effect that this proposed rule will
18 have on their lives.

19 EPA's own analysis of this rule
20 acknowledges that thousands of miners will
21 lose their jobs. Our estimates are that by
22 2030, when all of the emissions reductions are
23 supposed to be in place under this proposed
24 rule, about 65,000 people who work in the
25 coal, utility, and railway industries will

1 have lost their jobs. And when standard
2 economic multipliers are applied, we project
3 that more than 200,000 jobs will be lost in
4 all, due to this rule in the communities where
5 these people live and work. These job losses
6 will fall most heavily, of course, in the coal
7 producing areas of the country, including
8 Pennsylvania.

9 That puts works ability to provide
10 for their families at risk. And it puts the
11 retirement security for tens of thousands of
12 retired miners, their dependents, and their
13 widows at severe risk. About 13,000 of them
14 live right here in Pennsylvania.

15 It is important that we put into
16 perspective what this proposed rule does and
17 does not do. The Clean Power Plan is and
18 always was about taking action to reduce
19 greenhouse gas emissions from existing
20 sources. But will it? Indeed, I have been at
21 testimony in D.C. and in other places, and I
22 have heard many in the environmental community
23 complain that it does not got far enough, and
24 I can understand their point, if EPA's goal is
25 to significantly reduce global greenhouse gas

1 emissions.

2 As has been stated here before
3 today, this proposed rule does not do that.
4 Indeed, it will have a fairly insignificant
5 effect on global emissions, reducing them by
6 about 1 percent. But in exchange for that 1
7 percent, tens of thousands of coal miners,
8 electrical, boilermakers, utility workers,
9 railway workers and others will lose their
10 jobs.

11 The pensions and health care that
12 retired miners earned through decades of
13 dangerous, backbreaking work will be
14 threatened, if not eliminated entirely. The
15 harmful effect of their families and their
16 communities will be significant and in too
17 many cases irreversible. We don't see this as
18 a fair trade-off.

19 Some say there will be other jobs
20 created that our members can get, but where
21 will those jobs be? What will they pay? What
22 benefits will they have?

23 You're asking people who earn
24 about 27 dollars an hour, plus benefits, to
25 willingly give that job up, take the

1 government's word for it that there will be
2 another job somewhere, move away from the
3 place where their families have lived and died
4 for generations, and then get retrained to do
5 something that will likely pay much less than
6 they earned before, with few, if any,
7 benefits. Nor is it likely that this new job
8 will have the protections of a union
9 contract. How can anyone wonder why our
10 members are upset about that prospect?

11 Some have said that the United
12 States needs to take the lead on combating
13 climate change, and perhaps we do. But if we
14 do, will others follow?

15 I'm no expert in foreign affairs,
16 but one only has to read the newspaper to know
17 that rising economic competitors like China
18 and India have welcomed billions of what used
19 to be American jobs to their shores in just a
20 couple of past decades. They've been able to
21 do that by providing cheap labor and cheap
22 energy. They will continue to have both in
23 abundance for decades to come. And that
24 energy is and will continue to be powered by
25 coal, no matter what we do here.

1 Now, the UMWA does not dispute the
2 science regarding climate change nor the role
3 that greenhouse gas emissions play in climate
4 change. We understand the steps needed to be
5 taken to address the issue. Our very real
6 concern is that this proposed rule does not do
7 that in a way that is fair to all, and I
8 repeat all, Americans and their families.

9 UMWA has urged EPA to go back and
10 look at this rule again, because if the world
11 is truly going to be effective at
12 significantly reducing carbon emissions, then
13 the only path forward is to develop and deploy
14 carbon capture and storage technology world
15 wide, including here in the United States.

16 So, we have asked EPA to look at
17 how it can take meaningful steps in this rule
18 to incentivize the development and application
19 of such technologies which will allow our
20 nation to continue to take advantage of its
21 most abundant fuel source: Coal.

22 We also think that EPA's plan
23 should provide states for credit for prior CO₂
24 reduction, as it's been stated here before.
25 Under such an approach, Pennsylvania's

1 reduction target from its 2013 CO₂ emissions
2 from fossil-fuel electric generators would be
3 23 percent, rather than 31 percent called for
4 by EPA.

5 And lastly, we have urged EPA to
6 think again before it acts to threaten the
7 lives of the very people who did what our
8 nation asked of them, providing the coal that
9 for the last 150 years has energized America
10 and provided us with the means to become the
11 most powerful nation on earth. We can only
12 hope that EPA listens.

13 Thank you. And I welcome any
14 questions.

15 MAJORITY CHAIRMAN MILLER: Thank
16 you for testimony, Mr. Smith. I would just
17 take notice of the fact that I believe
18 Chairman Vitali and I both hear quite
19 frequently from our committee members on the
20 human factor involved in this in certain
21 areas. And with that said, I will recognize
22 Representative Snyder.

23 REPRESENTATIVE SNYDER: Thank you,
24 Mr. Chairman.

25 Thank you for your testimony. I

1 want to go on record saying I was proud to
2 march with those 7000 union members in
3 Pittsburgh on July 31st.

4 And I want to thank you for
5 pointing out, as we talk about these rules and
6 the environment, there's a social environment
7 here that gets lost in the shuffle. I know
8 what will happen in my district to those
9 families, to those workers. It will devastate
10 us economically, and there aren't 65,000 jobs
11 in my district to be replaced by those coal
12 jobs.

13 So, I really want to thank you for
14 your testimony. And keep up the good work.

15 MAJORITY CHAIRMAN MILLER: Thank
16 you.

17 Representative Vitali.

18 MINORITY CHAIRMAN VITALI: Thank
19 you for your testimony.

20 Just a couple of comments. I
21 mean, you say EPA has to look for another way,
22 but it seems that what they're doing is saying
23 to the six states, you choose the way. You
24 choose your options. And I'm not sure what
25 they would do differently, other than let

1 states choose their options.

2 I also might mention in passing, I
3 introduced a bill a couple of terms ago that
4 would develop carbon capture sequestration. I
5 got my head handed to me from all sides on
6 that issue. And if that's the way to go, be
7 looking for your support in the future with
8 something like that.

9 And my third and final point would
10 be, what -- it does seem that there is, if you
11 look at the charts from Jake and how natural
12 gas is going to be 94 percent and coal zero
13 percent, there is going to be a transition,
14 and I care about people, too.

15 What can we, as a state
16 legislature, do to help transition people who
17 will lose their jobs in some industries to get
18 jobs in other industries?

19 MR. SMITH: Thank you for your
20 comments. There are a couple of things I
21 think you could look at. Number one is, we
22 have a retraining program that's called the
23 UMWA Career Centers. And we have been using
24 that program for the last two decades to
25 retrain miners who, for one reason or another,

1 become unemployed.

2 For a while earlier in this
3 decade, we were training people to be miners,
4 because there was -- you know, there was,
5 earlier in the 2000s, there was a need for
6 that. Companies were looking for new miners.

7 The career center is operated
8 completely by grants and funding. It has,
9 over the years -- and I think Representative
10 Snyder can give you the more exact numbers
11 than I can -- received grants and funding from
12 the state of Pennsylvania, and we would
13 certainly encourage that to continue. They
14 retrain people to do all sorts of things. And
15 that is a very good program that operates in
16 the coal fields.

17 I don't know that -- part of the
18 problem that we have with that is that you
19 have to have a certain set skill set to be
20 able to qualify for some of these jobs. For
21 example, you need to have a high school
22 diploma. You need to have -- or the
23 equivalent. You need to have basic
24 understanding of mathematical skills or some
25 other sorts of skills. Many of the people who

1 work the coal industry just don't have those
2 skills, so they are not retrainable, as it
3 were, to do anything like what we're talking,
4 like drive a truck or operating heavy
5 equipment or do something else like that. So,
6 that's a problem.

7 Those folks are -- I don't know
8 where they're going to end up, and I don't
9 know what's going to happen, and that's
10 something that we're very concerned about,
11 honestly. So, that would be one specific way
12 that you could help.

13 MAJORITY CHAIRMAN MILLER: Very
14 good. Seeing no further questions, thank you
15 very much.

16 MR. SMITH: Thank you.

17 MAJORITY CHAIRMAN MILLER: Our
18 final presentation today is from Jeff McNelly,
19 executive director of ARIPPA.

20 Welcome, Jeff. I apologize for
21 keeping you waiting so long.

22 MR. MCNELLY: Oh, thank you very
23 much. Thank you for the opportunity.

24 Given that you've spent a complete
25 day listening to information about the rule,

1 we have decided not to get into that area, but
2 rather be very specific about Pennsylvania's
3 environment today and a very unique industry
4 that has been doing something about that
5 environment for quite some time.

6 Seated to my left is John
7 Oelbracht, and he's a plant manager
8 representative. So, accordingly, if you have
9 any technical questions, operational
10 questions, specific questions about how these
11 plants operate and so on, we are hopeful that
12 our testimony today will be unique in that
13 aspect, that you have, in essence, an operator
14 right here, sitting beside me, for any of your
15 questions.

16 That being said, good morning,
17 Chairman Miller, Minority Chairman Vitali, and
18 distinguished members of the committee.

19 My name is Jeff McNelly, and I
20 serve as executive director of ARIPPA. Seated
21 beside me is John Oelbracht, who also serves
22 as the resident manager of one of ARIPPA's
23 member plants, Westwood Generating. We are
24 both here on behalf of ARIPPA, and we
25 appreciate this opportunity to testify on the

1 effects of EPA's proposed Clean Power Plan.

2 ARIPPA is celebrating its 25th
3 anniversary this year as a Pennsylvania-based,
4 non-profit trade association. Its membership
5 is comprised of electric generating plants,
6 combusting coal refuse as primary fuel and
7 producing alternative electric energy and/or
8 steam. Most ARIPPA plants were originally
9 constructed within close proximity of vast
10 legacy coal refuse stockpiles in the
11 anthracite and/or bituminous coal regions of
12 the United States.

13 ARIPPA plants generate
14 approximately 5 percent of the total
15 electricity produced in the Pennsylvania, West
16 Virginia region. Hundreds to thousands of
17 citizens are directly or indirectly employed
18 by the ARIPPA industry and live, along with
19 their children and families, within close
20 proximity of the plants.

21 Historical coal mining management
22 practice included the abandonment of thousands
23 of acres of mine lands and the stockpiling of
24 a low quality, low BTU, non-marketable coal
25 known as coal refuse on surface lands.

1 Exposed to the natural elements, these unsafe
2 lands and stockpiles of coal refuse expanded
3 their negative environmental footprint over
4 time, causing much of our water, land, and air
5 to become unsuitable for the growth of
6 vegetation or the habitat of wildlife and
7 fish.

8 Pennsylvania's Department of
9 Environmental Protection has reported that
10 Pennsylvania has more than two billion tons of
11 coal refuse stockpiled on abandoned mine
12 lands, resulting in the largest source of
13 water pollution in the state. The estimated
14 time and cost to eliminate this legacy
15 environment is 500 years and nearly 15 billion
16 dollars of taxpayer funds.

17 An additional significant
18 environmental problem that has occurred in the
19 past, continues to occur today, and likely
20 will occur in the future, is the uncontrolled
21 burning of legacy coal refuse stockpiles.
22 Certain stockpiles, on occasion, naturally
23 combust due to Mother Nature and/or
24 unfortunate citizen activities. Such
25 combustion produces various uncontrolled

1 ground level emissions, including greenhouse
2 gas.

3 Pennsylvania has long recognized
4 this hazard and passed legislation in an
5 attempt to abate and/or control these
6 naturally occurring coal refuse fires. ARIPPA
7 is convinced that EPA is also aware of this
8 naturally occurring hazard and the correlating
9 release of uncontrolled ground level
10 emissions, including greenhouse gas. We feel
11 confident that EPA is also aware of the
12 release of methane gas that currently occurs
13 in most abandoned mine environments.

14 Coal refuse-to-alternative energy
15 Circulating Fluidized Bed plants have
16 collectively removed and converted, in a
17 regulated, controlled manner, over 200 million
18 tons of coal refuse and converted it into
19 alternative energy, thus eliminating one of
20 our major sources of land and water
21 contamination.

22 ARIPPA member plants have provided
23 a multi-media environmental and economic
24 benefit without the direct aid of taxpayer
25 dollars. These benefits include the

1 reclamation of thousands of acres of formerly
2 environmentally damaged mine-scarred lands,
3 resulting in the restoration of hundreds of
4 miles of formerly polluted streams, the
5 elimination of public safety hazards,
6 including the reduction in the uncontrolled
7 release of greenhouse gas, the production of
8 1,500 megawatts of alternative energy
9 electricity and/or steam while directly or
10 indirectly employing hundreds to thousands of
11 citizen workers.

12 Coal refuse-to-alternative energy
13 CFB plants were originally constructed subject
14 to federally mandated size restrictions. As a
15 result, most facilities are relatively small
16 in size, and the total emissions from the
17 industry on a nationwide basis are diminutive.

18 Conversely, the facilities'
19 relative small size makes it increasingly
20 difficult to comply with new costly regulatory
21 emission standards. When balanced against the
22 environmental benefits the industry has
23 provided over the past 25 years, we are
24 hopeful that EPA, DEP, and the commonwealth
25 will continue to see the value of eliminating

1 these negative environmental hazards through
2 controlled activities from an industry with a
3 proven net positive effect on our environment.

4 We are hopeful that the
5 Commonwealth will take every step possible to
6 help allow this industry to remain operational
7 and viable.

8 Pennsylvania DEP delivered a white
9 paper concerning the proposed greenhouse gas
10 rule to EPA recommending they establish
11 emission guideline targets based upon actions
12 that can be taken directly by operators at
13 existing sources that would actually be
14 subject to emission guidelines. This approach
15 is consistent with previous emissions
16 guidelines promulgated under the Clean Air Act
17 by EPA for other source categories.

18 The white paper also relates the
19 importance of recognizing the inherent
20 differences in rate-based versus competitive
21 energy markets and the need to provide for
22 electric grid reliability.

23 In its cover letter to the white
24 paper, Pennsylvania DEP wrote "The benefits of
25 utilizing coal refuse are that it is

1 essentially carbon neutral. Emissions of
2 other pollutants from coal refuse-fired
3 sources are well controlled, and sources of
4 acid mine drainage and ground water pollution
5 are removed."

6 ARIPPA wholeheartedly agrees and
7 supports DEP's suggested white paper approach.

8 Due to fuel considerations and
9 plant size, coal refuse plants utilizing CFB
10 technology cannot economically apply capital-
11 intensive carbon sequestration or advanced
12 efficiency technologies to reduce greenhouse
13 gas and continue to be economically
14 competitive in the marketplace.

15 Accordingly, ARIPPA supports, with
16 amendments, Pennsylvania House Bill 2265 and
17 Pennsylvania Senate Bill 1346. Both of these
18 bills, introduced this session, provide for a
19 reclamation tax credit for environmentally
20 beneficial alternative energy plants. We are
21 hopeful that the legislature concedes that the
22 challenge of reclaiming environmentally
23 damaged lands and streams by relatively small
24 electric generating plants trying to comply
25 with ever-increasing costly regulatory rules,

1 including this latest EPA greenhouse gas rule,
2 justifies legislative and financial support.

3 Given the widely recognized
4 25-year record of positive environmental
5 benefits the coal-refuse-to-alternate-energy
6 CFB industry has provided our nation, we
7 believe specialized energy sources such as
8 coal refuse plants should be excluded from
9 EPA's proposed rule. Accordingly, ARIPPA
10 requests that the committee assist our
11 industry efforts to secure an exemption for
12 new and/or existing coal-refuse-to-alternate-
13 energy CFB plants from EPA's proposed carbon
14 pollution standards rules.

15 While ARIPPA member plants have
16 always supported achievable emission
17 standards, we also believe that such standards
18 must be adopted in a lawful manner that
19 results in cleaner air, more jobs, and lower
20 energy prices to meet the increasing demand of
21 consumers. If any adopted rule would prevent
22 new or existing CFB coal refuse sources from
23 becoming or remaining economically viable, it
24 would impose extremely harmful consequences
25 for both the environment and the health/safety

1 of several affected states' citizens.

2 Detrimental rules may potentially
3 displace thousands of jobs in these economically
4 challenged areas and drastically reduce the net
5 amount of environmental benefits this industry
6 provides.

7 ARIPPA will be submitting specific
8 comments to EPA on this proposed rule and
9 ARIPPA will gladly provide a copy of those
10 comments to both the committee and DEP.

11 Again, ARIPPA appreciates this
12 opportunity to testify. John and I will stand
13 now for any questions you may have.

14 MAJORITY CHAIRMAN MILLER: I
15 appreciate your testimony and appreciate the
16 work that has been done to clean up the coal
17 refuse piles. I think the committee has
18 several times in the past visited such
19 operations and seen the good things that
20 happen to help clean up our streams and
21 mitigate some acid mine drainage.

22 I don't have any further
23 questions. Does anyone else?

24 That being said, thank you very
25 much for your testimony.

1 And this committee hearing is
2 adjourned. Thank you.

3 (Whereupon, the hearing concluded at
4 11:20 a.m.)

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REPORTER'S CERTIFICATE

I HEREBY CERTIFY that the foregoing is
a true and accurate transcript, to the best of my
ability, produced from audio on the said
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BRENDA J. PARDUN, RPR
Court Reporter
Notary Public