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FERC PERSPECTIVES: QUESTIONS CONCERNING EPA'S PROPOSED CLEAN POWER PLAN AND OTHER GRID RELIABILITY CHALLENGES

TUESDAY, JULY 29, 2014

House of Representatives,

Subcommittee on Energy and Power,

Committee on Energy and Commerce,

Washington, D.C.

The subcommittee met, pursuant to call, at 10:01 a.m., in Room 2123, Rayburn House Office Building, Hon. Ed Whitfield [chairman of the subcommittee] presiding.

Present: Representatives Whitfield, Shimkus,Pitts, Burgess, Latta, Olson, Gardner, Kinzinger, Griffith, Barton, Upton (ex officio), Rush, McNerney, Tonko, Yarmuth, Green Capps, Doyle, Barrow, Matsui, and Waxman (ex officio).

Staff Present: Nick Abraham, Legislative Clerk; Gary Andres,

Deputy Staff Director; Charlotte Baker, Deputy Communications Director; Sean Bonyun, Communications Director; Matt Bravo, Professional Staff Member; Leighton Brown, Press Assistant; Allison Busbee, Policy Coordinator, Energy and Power; Annie Caputo, Professional Staff Member; Patrick Currier, Counsel, Energy and Power; Tom Hassenboehler, Chief Counsel, Energy and Power; Brandon Mooney, Professional Staff Member; Mary Neumayr, Senior Energy Counsel; Chris Sarley, Policy Coordinator, Environment and Economy; Jeff Baran, Staff Director for Energy and Environment; Phil Barnett, Staff Director; Caitlin Haberman, Policy Analyst; and Alexandra Teitz, Chief Counsel for Energy and Environment.

Mr. Whitfield. I would like to call the hearing to order this morning.

And certainly want to thank all of the FERC commissioners for joining us at this morning's hearing in which we are going to get your perspectives on questions relating to EPA's proposed Clean Power Plan and its impact on reliability, as well as other challenges. I know that you all have a very busy schedule, and we do appreciate very much your being with us this morning to explore this very important issue.

At this point, I would like to recognize myself for 5 minutes for an opening statement. As I said, this is our second hearing on EPA's proposed Clean Power Plan, which would change the way electricity is generated, transmitted and consumed in each State.

Our first hearing focused on the EPA itself, and I must say that it was obvious from that hearing that EPA does not have the expertise on the intricacies of electric markets and reliability implications of this radical transformation that they are proposing for electrical generation, the electric generation sector.

As I noted before, we are also seriously concerned with this proposed rule; for one thing, EPA's unprecedented use of the Clean Air Act is questionable on legal grounds. Legal experts, and we always know there is conflicting legal experts, but many legal experts see nothing in the Clean Air Act that empowers EPA to commandeer State

decisionmaking authority over how each State produces, delivers and uses electricity.

The EPA is also embarking on a comprehensive effort to Federalize electric generation, even though the Agency, as I said, has absolutely no energy policy setting authority or expertise. That is why it is important today to hear from the Federal body that actually does have that authority and expertise. Although, I might add that the top-down command and control efforts of EPA go far beyond even FERC's jurisdiction.

As a preliminary matter, I would like to better understand FERC's level of participation in this proposed rule. Is FERC an equal partner with EPA, a junior partner or hardly a partner at all in promulgating this rule? And what would be FERC's role in implementing this rule? We are also interested in tapping into FERC's considerable expertise on electric reliability. As I suspect, many reliability concerns with this proposed rule that have not been considered by EPA.

As it is, the Agency has already promulgated a number of different rules that have contributed to coal-fired power plant shut downs. This proposed rule would lead to more of the same. So we are interested in learning from FERC whether it believes coal-using states can abruptly and quickly move away from this base-load source without raising significant reliability concerns.

I am also worried by many of the assumptions of EPA that they make as to how States can meet electricity demand while complying with the

rule. For example, the Agency suggests that States can easily ramp up natural gas-fired generation to help meet the target goals, but we know from the experience of last winter that several regions of the country have natural gas pipeline capacity constraints.

Similar questions about EPA's optimistic assumptions regarding the ability of renewables to help fill the void, especially given the many challenges that come with integrating intermitted resources into the grid. And the limitations of renewables will be exacerbated, if affordable and reliable base loads supplies, like coal and nuclear and even natural gas, face a constrained future as they do under the Obama Administration.

Overall, we see great risk in EPA trying to overrule the State's choices as to the best electricity mix as well as risk in constraining a State's ability to change its generation portfolio and as you know, at a certain timeframe within this proposed rule, States can't change, even if they might want to. So EPA's proposed efforts dictating electricity use is quite troubling. This is an area where the reach of the Federal Government has been limited, and for good reason, since these local resources decisions are best left to States.

So we look forward to your testimony today. I know we have a lot of questions for you, and certainly, as I said, you all have the expertise and we look forward to your opening statements.

And with that, I would at this time recognize the gentleman from Chicago, Mr. Rush, for his 5-minute opening statement.

[The prepared statement of Mr. Whitfield follows:]

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Mr. Rush. I want to thank you, Mr. Chairman, for holding this important hearing on FERC perspectives, questions concerning EPA's proposed Clean Power Plan and other grid reliability challenges.

Mr. Chairman, as the title suggests, we are here today to hear from the FERC commissioners on the impact that we can expect President Obama's Clean Power Plan to have on a variety of issues related to fuel diversity, the integration of variable energy resources, natural gas, electricity generation and grid reliability, among many other topics.

Mr. Chairman, last month, this subcommittee heard testimony from Acting Assistant Administrator of the Office of Air and Radiation, Janet McCabe, that in developing the Administration's Clean Power Plan, EPA consulted on reliability-related issues with DOE, FERC, State, public utility commissioners as well as the Independent System Operators Regional Transmission Organization Council.

In fact, when determining the best system of emission reduction, or BSER, reliability was one of the key factors that EPA considered and the Agency made sure to allow flexibility for States to design and implement their own programs in order to ease pressure on the system reliability.

Additionally, Mr. Chairman, the EPA proposed to give States a 10-year period to achieve their final goals, which allows for measures to be phased in to ways that protect reliability. But why is it so important that we act at all? Well, Mr. Chairman, a series of

assessment reports have come out recently, including the third national climate assessment, the fifth intergovernmental panel on climate change assessment, the EPA's climate change indicators in the U.S. 2014, and the bipartisan risky business, the economic risk of climate change in the U.S.

Each of these reports highlights the devastating consequences of climate change on both public health and the environment, and each urging policymakers, you and I, Mr. Chairman, to act. And what have we learned from all of these telling studies, Mr. Chairman? We have learned that 7 of the 10 top warmest years on record have occurred since 1998 and dangerous heat waves have become more and more frequent.

We have learned that extreme storms threaten to flood coastal communities, risking lives and that cyclone intensity has increased over the past 20 years, were 6 of the 10 most acting years since the 1950s occurring during that period. We have learned that dangerous wild fires continue to intensify, reducing air quality, threatening forests, threatening property and risking the lives of firefighters. We have learned that the area of land burned by wild fires annually has increased since the 1980s and that 9 of the 10 years was the most land burned have occurred since 2000.

We have learned that by mid-century, farmers in the midwest will face crop year decline of up to 19 percent and by the end of the century, States like Oregon, Washington and Idaho could experience as many hot days over a 95 degrees Fahrenheit as currently expected in the State

of Texas. We have learned that as climate warmed, labor productivity in key sections including construction, agriculture and utilities would likely be reduced and that these reductions and labor productivity may be the greatest in the southeast.

So Mr. Chairman, it is for all of these reasons that President Obama has decided to act and fill the void left by this very same Congress in hopes of mitigating some of the most devastating effects on climate change due in large part to emissions from some of the nation's oldest and dirtiest power plants.

Mr. Chairman, I look forward to this hearing on the FERC commissioners' responses to questions and on the FERC commissioners to the President's plan, their response to the President's plan. And with that, Mr. Chairman, I want to yield back all the time that I might have.

Mr. Whitfield. Gentleman's time is expired.

Mr. Rush. Right on time.

[The prepared statement of Mr. Rush follows:]

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Mr. Whitfield. At this time, I would like to recognize the gentleman from Michigan, Mr. Upton, chairman of the full committee for a 5 minute opening statement.

The Chairman. Well thank you, Mr. Chairman.

A couple weeks ago, EPA's Acting Assistant Administrator Janet McCabe told this subcommittee that the Agency's proposed rule for existing electricity generation is not an energy plan but rather it is a pollution control rule. Then last week, Administrator Gina McCarthy made the exact opposite argument during her testimony before the Senate that the proposal is not about pollution control but, in fact, it is about energy and spurring investments in the EPA's preferred energy choices.

This comparison of exchanges by the two top officials at EPA demonstrates the Agency's current dilemma. After failing to push comprehensive cap and trade legislation through a Democratic Senate because of legitimate fears that it would hamstring our economy and make energy more expensive, the Administration is now pursuing a plan B approach by stretching the Clean Air Act to accomplish the exact same goals.

Assistant Administrator McCabe's answer is the one that the agency will likely stick to when the rule gets challenged in court, as EPA has no explicit energy policy setting authority under the law. But Administrator McCarthy had the more candid response, as this rule

clearly is an effort by EPA to assert control in new regulatory authorities over States' electricity decisionmaking.

EPA's Clean Power Plan requires States to submit for approval individual or regional energy plans to achieve the agency's carbon dioxide emission targets. EPA is systemically Federalizing under the Clean Air Act what was once in the clear purview of the States or the markets. If the States are truly the labs of democracy, then why assert the Federal Government over their energy planning?

FERC is the agency charged by Congress with regulating electricity in interstate commerce, which is why it is so important to gain FERC's perspective today. Even this Agency, with explicit authority over electricity matters, does not have the expansive reach and vision by EPA's Clean Power Plan. I am particularly concerned about the Clean Power Plan's impact on energy diversity. Maintaining a diverse energy portfolio is a core component of this committee's vision for America's energy future, a vision that we call the architecture of abundance.

Consumers and businesses are best served by an electricity supply that can be generated from a variety of sources: Coal, nuclear, natural gas, obviously, as well as renewables, and in the proportion that each State deems best to suit its unique circumstances.

Maintaining diversity, both diversity in our electricity generation portfolio as well as the diversity of strategies for meeting a State's electricity needs is critical to affordable and reliable

energy, but EPA's top-down Clean Power Plan will give us less of both kinds of diversity.

I thank the FERC commissioners today and certainly welcome Mr. Bay for his first appearance before us. And I yield the balance of my time to Mr. Shimkus.

[The prepared statement of The Chairman follows:]

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Mr. Shimkus. Thank you, Mr. Chairman.

Reliable low-cost energy is a critical and key asset to this country and for job creation. We appreciate what you do to help maintain that.

In my sole region this winter, we came very close to the demand meeting supply, and I think that is a thing that hopefully you will help focus on. Base load is a key component of that, and as these rules drive some generating facilities out of the market closure, then we are going to have these concerns, and woe be it to the member of Congress that has brownouts during the hottest time of the summer or the coldest time in the winter.

There is also the big debate, you guys are involved with it on the transmission grid. As we pick and choose winners and losers and electricity generation, we have to move electricity larger distances and that stirs up the public. I think there is a credible debate about localizing generation and then not having these transmission fights.

As you have heard me before numerous times, I am also concerned about the physical security aspects. As a former Army officer on the, you know, during the Cold War, we worried about the Soviets doing electromagnetic pulses that would knock out transmissions and I know that is not the focus of this hearing, but security aspects of that, and maybe it is not a terrorist attack, maybe it is just a solar flare that really causes great concerns, and I am going to be watching that

and involved with that in this year and the next couple years.

The last thing I would like to, with this time, is just, Chairman LaFleur, and I will follow up with my questions, when you last appeared for us, you said you would keep your fellow commissioners in consultation with you. I think some of the testimony kind of questions that, based upon meetings with the EPA, and I hope we get clarification on that.

Thank you, Mr. Chairman. I yield back my time.

Mr. Whitfield. The gentleman yields back.

[The prepared statement of Mr. Shimkus follows:]

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Mr. Whitfield. At this time, we will recognize the gentleman from California, Mr. Waxman, for a 5-minute opening statement.

Mr. Waxman. Thank you very much, Mr. Chairman. I would like to thank each of the commissioners for being here today, and I especially want to congratulate and welcome Mr. Bay who has just been confirmed to the commission.

The Federal Energy Regulatory Commission plays a key role in maintaining the reliability of electric grid and protecting electricity consumers. That is what makes your job so important. The Republican members of this committee deny the existence of climate change or pretend it doesn't exist. They see the EPA's Clean Power Plan for the power sector as a threat to grid reliability, and that is why they have called you here this morning. They hope you will say something that will give them ammunition.

But those of us who are listening to the overwhelming scientific consensus see carbon emissions from power plants, not EPA regulations, as the real threat to the grid. The facts are sobering. Last year the levels of heat-trapping carbon pollution in the atmosphere exceeded 400 parts per million for the first time in millions of years. Last year was the fourth hottest year on record, 7 of the 10 hottest years on record occurred in the last decade, and all 10 occurred since 1998.

Wild fires in the west have gotten much worse. Droughts are setting records and devastating harvest. Sea-level rise and fierce

storms are threatening our coast. These, and many other indicators, tell us that global warming is harming us now, and it is going to get much worse. The power sector will feel these impacts. Intense storms will disrupt power delivery. Droughts and rising temperatures will force plant shut downs. Transmission systems will lose capacity at high temperatures.

And that is why the Clean Power Plan is so important for the grid and for our future. It was issued by EPA, but I am sure it went through an interagency review, because it is important to get FERC's perspective. A significant transition is under way in the power sector. Market forces and public policies are driving a shift to renewables, demand side efficiency and natural gas fire generation. We have doubled our capacity to generate renewable electricity from wind and solar in just 5 years.

Wind power is already cost competitive with fossil fuel generation in parts of the country and the cost of solar power is plummeting. Natural gas costs less than coal and even coal boosters acknowledge that it is not cost effective to build new coal plants today because of the competition from natural gas, not because of any regulations by any government agency.

These changes in the electricity sector are bringing Americans cleaner air, new jobs, lower bills and more choices. The Clean Power Plan will advance these positive developments. FERC, too, should make its own contribution. The statutory standards that FERC administers,

gives the agency many tools to help combat climate change and create the clean energy economy of the future.

And I want to bring to the members' attention, the University of California Berkeley Center for Law, Energy and the Environment report that was recently issued on this subject, authored by Steven Weissman and Romany Webb, which I ask unanimous consent to insert in the record.

Mr. Whitfield. Without objection.

[The information follows:]

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Mr. Waxman. I hope all the commissioners will give these ideas serious consideration. As this new report shows, we don't have to choose between protecting the environment and reliable electricity. FERC grid operators, State public utility commissions and power plants, even progressive power companies are already planning for the changes that are under way.

Our nation has a proven track record of adapting to new environmental requirements without adverse impacts on reliability. We don't have to cling to the past, and we don't need to be afraid of the future. We can protect our environment, strengthen the grid and leave our world a better place for our children.

Thank you, Mr. Chairman. I yield back my time.

Mr. Whitfield. Gentleman yields back.

[The prepared statement of Mr. Waxman follows:]

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Mr. Whitfield. At this time, we look forward to the opening statements of the commissioners of the FERC. And we have with us this morning, the Honorable Cheryl LaFleur, who is the acting chairman; we have the Honorable Phillip Moeller, who is a commissioner; we have the Honorable John Norris and Tony Clark; and our newest member, Mr. Norman Bay of New Mexico.

So at this time, Chairman LaFleur, we will recognize you for 5 minutes for your opening statement. Make sure your microphone is on, and we look forward to your testimony.

STATEMENTS OF THE HON. CHERYL A. LAFLEUR, ACTING CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION; THE HON. PHILIP D. MOELLER, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION; THE HON. JOHN R. NORRIS, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION; THE HON. TONY CLARK, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION; AND THE HON. NORMAN C. BAY, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

STATEMENT OF THE HON. CHERYL A. LAFLEUR

Ms. LaFleur. Well, thank you very much, Chairman Whitfield, Ranking Member Rush and members of the subcommittee.

I am honored to serve as the acting chairman of the Federal Energy

Regulatory Commission, and I appreciate the opportunity to be with you this morning.

As this subcommittee is well aware, the Nation's resource mix is changing in response to a number of factors, including the increased availability of domestic natural gas, growing use of renewable generation in response to State and Federal policies, and new environmental regulations. Although these drivers of power supply changes are themselves outside the commission's jurisdiction, we must be aware of and adapt to them to carry out our responsibilities to promote reliability and ensure just and reasonable rates for customers.

Our work supports reliability in three primary ways: First, FERC supports the timely development of needed energy infrastructure. The commission has permitting authority over natural gas pipelines, LNG terminals and non-Federal hydropower. We also support new infrastructure through our rate authority over those facilities and over electric transmission.

Second, FERC oversees wholesale power markets that support reliability. We work to ensure that centralized capacity, energy and ancillary services markets send correct signals to support the procurement and retention of resources needed for reliability.

Finally, FERC directly oversees the reliability of the grid by establishing mandatory standards for the bulk power system under Section 215 of the Federal Power Act. It has been almost 10 years since Congress enacted Section 215, and I believe the commission has

established a solid track record not just on day-to-day reliability, but on emerging issues, like cybersecurity, physical security and geomagnetic disturbances.

As I mentioned, one of the key drivers of changes in our resource mix are new EPA regulations regarding air, water and solid waste pollution. EPA is, of course, responsible for promulgating environmental regulations under the statutes it implements. We, in turn, are responsible for helping ensure that reliability is sustained as new environmental regulations are carried out. Our work in this area is not limited to interactions with EPA but includes collaborations with states, industry and other stakeholders.

One recent example is our work on the mercury and air toxic standards where we issued a policy statement outlining how we would advise EPA on when additional time might be needed to comply with the mercury and air toxics in order to avoid a reliability violation. We also established a regularly-scheduled public forum with NARUC, co-led by my colleague, Commissioner Moeller and myself and our State colleagues, to regularly collaborate with EPA and other stakeholders on how the MATS rule and other rules were being implemented.

I have closely followed the development of the Clean Power Plan because I believe it will have implications for the operation of the grid and require FERC engagement to ensure that reliability is sustained. FERC staff commented on the proposal through the OMB interagency review process from a reliability perspective. Among

other recommendations, FERC staff emphasized the need for the development of natural gas pipeline and electric transmission infrastructure to enable compliance with State compliance plans. FERC staff also emphasize the importance of regional cooperation to promote efficient compliance with the Clean Power Plan.

I appreciate that the plan gives considerable flexibility to the States to use the different building blocks it outlines, but I believe FERC will have at least three important roles: First, to support the development of pipelines and transmission that will be needed to attain the goals of the plan; second, to consider how market structures need to adapt to support the research choices that states make under the plan; and finally, to continue to be closely engaged with EPA and the states and others to identify any problems and help to make sure they are addressed.

Reliability has been my top priority in my time at FERC, and I believe it is job one for anyone involved in electricity. I have seen many changes to the Nation's resource mix in the past 30 years, but the central importance of reliability is unchanged, even as new technologies and new environmental challenges and aspirations emerge. As FERC chairman and as a commissioner, I will continue to champion these issues.

I thank the subcommittee for giving me the opportunity to appear, and I welcome your questions.

Mr. Whitfield. Thank you, Ms. LaFleur.

[The prepared statement of Ms. LaFleur follows:]

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Mr. Whitfield. At this time, recognize Mr. Moeller for his 5-minute opening statement.

STATEMENT OF THE HON. PHILIP D. MOELLER

Mr. Moeller. Thank you, Chairman Whitfield, Ranking Member Rush and members of the committee.

I am Phil Moeller. I have been on the commission since 2006. Thank you for holding this hearing on a very important subject, the EPA's Clean Power Plan. As its name indicates, this is essentially power or electricity policy, so it is very relevant that we are here talking about it because we have the job under Section 215 of the Federal Power Act to assure the reliability of the Nation's bulk power grid.

And reliability should not be, and I don't think it is, a partisan issue, but it has to be our job, number one, so we have to look skeptically at these kinds of proposals to make sure that we can keep the lights and more importantly the heating and the cooling on when consumers need it.

The biggest challenge, I think, in this rule is that it treats states individually in terms of compliance, but electricity markets are fundamentally interstate in nature and that just creates some challenges that may not be insurmountable but need to be looked at very closely. In my written testimony, I have noted a few examples of states

that certainly have concerns about how they will be treated.

Idaho, for instance, consumes coal power but doesn't generate it, so what does that mean for its baseline now in going forward? We have states like Wisconsin and New Jersey that spend significant amount of money, billions of dollars to clean up their fleet, but they don't get credit under the Clean Power Plan. And then there are stranded assets, such as the one I note in Mississippi, where $1 billion of scrubbers is essentially not counted under the plan. So those are issues you will hear about as the comments come in on the rule.

The rule is based on compliances on four building blocks. You have probably gone into them. I will point out one that has a little bit of concern to me, which is essentially getting the gas fleet up to 70 percent dispatch. Now, the challenge there is that we have traditionally gone under something called economic dispatch where the cheapest power plants are called in the merit order of dispatch. This would change it to environmental dispatch. You can do that with a carbon fee and mesh the two, but obviously the prices go up. It is a fundamental change, not only with how we regulate power but actually how the system is operated, and it needs to be examined very closely.

The related issue that concerns me has to do with the example we have in New England. Almost everybody in the country, not universally, but almost everyone believes that we need more pipeline into New England because of the pipeline constraints. The challenge is financing it, because pipelines have traditionally been financed under long-term

contracts with local distribution companies, but the new customer class for pipelines is basically power plants that may or may not be called on a daily basis based on the market they are in.

So with that, the challenge is how do you get long-term financing with power plants that aren't going to sound essentially long-term contracts. Now, these are not insurmountable problems, but it is a real issue in New England. We haven't been able to solve it and I am concerned that if we move to a system where there is a lot more gas generation to be dispatched, are we going to have the pipeline capacity? Can we finance the pipeline capacity to meet that need? It is a real conundrum, one that we need to take a look at more closely.

Essentially, what I have been calling for is a more formal role for our commission as we deal with EPA on these issues, kind of an open and transparent role, so that basically we can get the engineers together to discuss the challenges involved because it really comes down to a very granular level with reliability. The laws of physics will trump regulations. There are always unintended consequences when we shut down power plants because, although they may not produce a lot of power, they may be producing other products, ancillary services that maintain reliability in the grid. And the location of those plants is key, and sometimes you can't replicate a plant in that location.

So the granular level of analysis is very important, and I think it should be open and transparent because, engineers can disagree, but we need kind of an open forum for them to do it. I am also not here

to say that we shouldn't do anything. I think we can do a lot of good by essentially improving and modernizing the pricing of electricity. Under the leadership of Acting Chair LaFleur, the FERC has opened up a proceeding on price formation in the wholesale markets. This is overdue, it is a good effort. I am kind of impatient. I want this to move forward, because we have some inefficient pricing right now.

Similarly, at the retail level, I urge my colleagues at the State level to consider more realtime and dynamic pricing at the retail level because that will send more accurate pricing to consumers, and hence, they should use their power more efficiently.

Again, thank you for having us, and I look forward to any questions you have.

Mr. Whitfield. Thank you, Mr. Moeller.

[The prepared statement of Mr. Moeller follows:]

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Mr. Whitfield. Mr. Norris, you are recognized for 5 minutes.

STATEMENT OF THE HON. JOHN R. NORRIS

Mr. Norris. Chairman Whitfield, Ranking Member Rush and members of the subcommittee, thank you for the opportunity to share with you my thoughts on how EPA's proposed Clean Power Plan will work. The fact that we are here today having this discussion on reducing carbon emissions, to some degree, tells me it is already working.

As you may have read in my written testimony, I believe the EPA's proposed Rule 111(d) can work. The flexibility provided in the rule, along with the continuous communication and cooperation between EPA, FERC, NERC the states, RTOs, industry and others to make appropriate adjustments along the way to ensure reliability lead me to the conclusion that we can reduce carbon emissions and keep the lights on. If the question is, is this the most efficient way to reduce carbon emissions in our electric sector? I would give you a firm no, it is not.

I applaud the EPA for this action but recognize that this was the only option available to curtail harmful greenhouse gas emissions because Congress has failed to act. Placing a cost or a value on carbon consistent across the country would, I believe, be a far and away more efficient and fair way to address carbon emissions. While the EPA's

proposal does provide more certainty on energy investment than before an industry struggling with uncertainty, it is nowhere near the clarity and direction legislation establishing a national energy policy on carbon would provide.

Let me share with you an excerpt from an interview from a former Republican colleague of yours. He tells of a conversation he had with an elderly gentleman about the need for a carbon policy, and I quote: I was talking to him about, "What about your grandkids?" And he said, "I think they can get by on their own." I don't think that caring fellow really meant it quite that bluntly. I think what he meant was somebody will figure something out.

And, of course, my response to him is, "Well, technological innovation will sure work better if we set the economics right, because what we believe as conservatives and people who believe in free enterprise is if you get the economics right, somebody chasing the dollar would deliver to me a better product. They will make money and they will serve my needs. That is what makes our system go around.

"But if you can't get to that next step of getting the price on carbon, because if you attach that price, the external hitting cost of the product, it changes economics and all kinds of exciting things happening for the enterprise system." But he wants to stick at that point of saying it is not a cost, that CO2 is not a cost; it is not a negative. If it is a negative externality, it is a value of zero. If you attach a zero to it, there is no change in the pricing structure.

So for him, it is very important to continue to deny the science because he wants to assign a zero to the cost of carbon.

That was former Congressman Bob Inglis, who is providing a strong, conservative economic voice on this issue, a voice worth listening to. I, too, believe the best way to address climate change is to first recognize the overwhelming evidence provided by scientists throughout the world that our planet faces severe consequences if we do not take action. The U.S. can and should help lead a worldwide effort to reduce carbon emissions, and that our innovative and entrepreneurial spirit will seize the opportunities to tackle this problem.

If we are here today to debate whether the EPA's proposal will work or not, I fear Congress is missing the point, again. A rule that is not yet finalized but empowers 50 states with significant flexibility to address the proposed regulations and then grid operators to work to incorporate those State decisions into their operations, it will nearly be impossible to be proved today that it will or will not work.

But if the EPA and every other entity involved commits to making it work, I am confident it is achievable. But for the sake of our consumers, our utility businesses and America's entrepreneurs and innovators, we as a Nation could take a better course of action and enact a national energy policy to begin the transition to a low-carbon economy.

Reliability will always be one of my highest priorities as a

commissioner. It is my responsibility, and I will not hesitate to step forward and take appropriate action if grid security is threatened by this proposed rule or any other threat or reaction. But this rule is a very gradual transition, and I believe a very necessary transition, for I believe my responsibility as a citizen and public servant is to also speak up for my children, the children of America and the world. We are talking about action that threatens their future.

Much talk, I think, is spent on addressing the financial debt we are leaving our children, and I commend all of you here today who are addressing that issue. But I hope you will also consider the atmospheric debt we are not adequately addressing. This is a debt I believe even more devastating but also deadly.

Thank you. That concludes my testimony. I look forward to your questions.

Mr. Whitfield. Thank you, Mr. Norris.

[The prepared statement of Mr. Norris follows:]

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Mr. Whitfield. Mr. Clark, you are recognized for 5 minutes.

STATEMENT OF THE HON. TONY CLARK

Mr. Clark. Thank you, Chairman Whitfield, Ranking Member Rush and members of the committee.

I hope you will allow me a point of personal privilege for an introduction that I have today which is, in probably the half a dozen or so times that I have testified in front of Congress, I have never had my boys be able to join me. They have always been in school or back home in North Dakota, but today they are here. So Alex and Thomas.

Mr. Whitfield. We will have some questions for Alex and Thomas.

Mr. Clark. I am sure he looks forward to them. They can now look 30 years into the future being able to look back into a Congressional record and see their names are in there.

Out of respect for your time, I won't repeat the testimony that I submitted, but instead will probably just extend a little bit upon it. It is quite clear from the questions that we received from all of you, the pre-hearing questions that preeminent in the minds of the committee are, can FERC answer questions related to the EPA rule and whether they will be a concern about either cost or reliability.

I think, hopefully, what you gathered from my responses were that it is probably too early to know with specificity exactly what those

impacts will be and the primary driver for is that is that we simply don't know what the potential State implementation plans, compliance plans might look like, and we also don't have a sense for what a Federal implementation plan or a Federal compliance plan would look like.

Typically, as the EPA has proposed rules, there would be a marker for what a Federal plan might look like; in this case, we don't have that. So it is a little tougher for us, I think, as a commission, to model it. But I think we can make some general comments about the trendline that we might at least wish to keep in mind especially as a commission as we work through some of these issues.

And what really got me thinking about it was an article that I read in the Washington Post last Friday, actually, after I had submitted my written testimony, which was about the challenges that a community in Colorado was having with regard to changing over their fleet in a relatively short amount of time, and there were some costs concerns that were taking place in that community. It happened to be Pueblo. And it got me thinking about the EPA proposed rule and what might be pathways to it.

It is quite clear, although the EPA has said that they will offer flexibility to states, a pathway that they have offered up as a potential one that might be compliance, relies in some part on a combination of perhaps cap and trade, like a regional gas house initiative like they have in the northeast, some sort of reliance on energy efficiency and demand response resources, a shuttering of coal

plants and, at the same time, pivoting towards heavier reliance on natural gas, perhaps some sort of renewable portfolio standard in the State.

So you put all these things together, and it actually looks very much like what one of the regions has already been going through, which is the one that Commissioner Moeller mentioned, which is New England. I think one of the things that FERC and Congress will need to keep its eye on as we potentially move forward in these rules is, at least from my perspective, if someone were to ask me which area of the country do you have the most concern about both as a matter of cost and reliability, I would probably point to New England, not solely because of some of the things that have happened already with regard to carbon regulation, but certainly some of those things do play into it.

So should the EPA rule come to pass? I would think that FERC would need to ensure that as it moves forward, we would want to make sure that some of the concerns that we have seen already happen in New England with the pipeline constraints and the rapid conversion to gas and the very tight reliability system and sometimes very high cost for electricity aren't exported to other regions of the country, and overcoming that could be, indeed, a challenge.

With that, I will end my testimony, yield back the remainder of our time and look forward to your questions.

Mr. Whitfield. Thank you very much, Mr. Clark.

[The prepared statement of Mr. Clark follows:]

******** INSERT 1-4 ********

Mr. Whitfield. At this time, we will recognize the gentleman from New Mexico, Mr. Bay, for a 5-minute opening statement.

STATEMENT OF THE HON. NORMAN C. BAY

Mr. Bay. Chairman Whitfield, Ranking Member Rush and members of the subcommittee, my name is Norman Bay, and I currently serve as the Director of the Office of Enforcement at FERC.

On July 15, it was my honor to have been confirmed by the Senate to serve as a member of the commission. I anticipate being sworn in once all the necessary arrangements have been completed. Thank you for inviting me to testify at this hearing regarding EPA's proposed Clean Power Plan and other grid reliability challenges. I look forward to working with this committee in my tenure on the commission.

One of FERC's critical responsibilities is the regulation of electric reliability. As the Director of the Office of Enforcement, I have been involved in investigations of potential reliability violations and inquiries into major reliability events, but I have not been involved in the EPA rulemaking.

While the EPA has responsibilities under the Clean Air Act and other legislation, the commission has similar and no less important responsibility to promote the reliability of the bulk power system.

One way that I believe the commission can help to ensure

reliability is through open communication and a strong working relationship with the EPA; the Department of Energy; the States and NARUC; the North American Electric Reliability Corporation, or NERC; regional transmission organizations; independent system operators; and industry. It is my understanding that FERC staff, EPA and DOE have communicated at various times regarding the EPA's power sector regulations. The agencies should continue this effort to ensure that the EPA is aware of any potential impacts its regulations may have on the reliability of the bulk power system.

To the extent necessary and appropriate, commission staff should continue its communications with EPA and industry participants subject to FERC's regulation, including RTOs and ISOs and public utilities. Once I am sworn in, I look forward to meeting with my colleagues to discuss in greater depth these issues and to examine how we can work collaboratively within the commission's authority to promote the reliability of the bulk power system.

Thank you for inviting me to testify here today. I look forward to remaining engaged with the committee and the EPA, DOE, NERC, the states and industry on these important issues.

Mr. Whitfield. Thank you, Mr. Bay, and thank all of you for your testimony.

[The prepared statement of Mr. Bay follows:]

******** INSERT 1-5 ********

Mr. Whitfield. At this time, we will recognize the panel for questions, and I will recognize myself to start off for 5 minutes of questioning.

It is quite clear that anyone who has examined the Clean Power Plan views it as a fundamental change and President Obama frequently talks about Congress being an obstructionist, and Mr. Norris made the comment this is necessary because Congress has failed to act. And I would point out that Congress did act by deciding not to act. When Mr. Waxman was the chairman of this committee, the Cap and Trade Bill was reported out of the House of Representatives. It went to the Senate, and the Senate did not adopt it. So Congress did act in the sense that it did not adopt the cap and trade.

One of the frustrating -- and I am sure that President Obama is frustrated, and it is great that we have hearings like this to bring all of this out into the open, to have a discussion for the American people. Because one of the frustrating parts for the American people is when they see decisions affecting basic services like electricity and the impact that that has on our economy being made by the courts and by regulators, and they view that as not really being transparent.

So we in Congress, we do not intend to just lay down and let the President do whatever he wants to on climate change or any other issue without having a public discussion about it. And so CO2 emissions, by the way, today are the lowest from energy sources that they have

been in 20 years. Lisa Jackson even made the comment that even if we move vigorously forward as we are attempting to do here on CO2 emissions, it would make no difference unless other countries do the same.

And we see in Europe today, they are mothballing natural gas plants because natural gas prices are so high coming out of Russia that they are building coal plants today. And we, under this plan, would not have the flexibility to build a new coal plant if natural gas prices go up because the technology is not available to be able to do it in a economic way that would make it possible to do it. We don't have enough money to build Kemper plants all over America the way they are attempting to do in Mississippi, and it is not being done without Federal dollars.

So this kind of discussion, I think, is invaluable. Mr. Rush had made the comment about the drought and the impact on farmers, and I would tell you, the price of corn has fallen from $8.10 a bushel down to $4 a bushel because corn is so abundant right now. So there are lots of different perspectives on this.

But Ms. LaFleur, everyone is concerned about reliability, and we have asked the EPA about this and we ask this question of you in our written questions: Did the EPA request a written document from FERC relating to reliability? Do you have a written report that was given to EPA on reliability issues?

Ms. LaFleur. Thank you for that question, Congressman

Whitfield.

No, they did not request written comments. My understanding, this is the first time I have been through the interagency review, but there were a number of staff meetings and then a, kind of a formal debrief where we made our comments over at the OMB with a number of EPA people there. And we kept a memo, but we did not turn them in in writing because that has not been the practice.

Mr. Whitfield. I personally think that is disappointing because reliability is such a key issue.

Mr. Moeller, I don't have a lot of time left, but would you just comment briefly on this economic dispatch versus environmental dispatch and how that might get to a cap and trade system?

Mr. Moeller. Well, that is one of the four building blocks, and the building block is an aspiration to get the gas fleet up to 70 percent dispatch, which has been very rarely done in this country, only in very limited circumstances. So there are some operational questions.

But essentially, the only way, I mean, if you have to hit your target by increasing your gas fleet production, that is going to trump what is normally economic dispatch of the cheapest plant. Now, the only way you can reconcile that is then put a fee on the other sources, and it is talked about in the rule, you put a fee on the other carbon emitters so that they are less competitive to gas. So that is how it would be done.

Mr. Whitfield. Well, thank you. My time is expired.

At this time, I recognize Mr. Rush for 5 minutes of questions.

Mr. Rush. Thank you, Mr. Chairman.

Mr. Chairman, the American people are tired of the finger pointing, they are tired of the excuse after excuse, the blame that goes from one to another. They are really, really tired of the inaction and the inertia that seems to be the standard of this Congress.

There is no question, Mr. Chairman, that we need to reduce our carbon pollution if we are going to avoid the worst impacts of climate change. No question about it and the power sector is the largest source of carbon pollution in the U.S. There is no question about this. Mr. Chairman, I believe that the EPA's Clean Power Plan is a reasonable approach to reducing emissions from power plants in light of the unending excuses, in light of this Congress' failure to act.

Commissioner Norris, do you agree that a Clean Power Plan is a reasonable approach since this very Congress has failed to act?

Mr. Norris. I think the EPA plan is, as I mentioned, the most feasible, reasonable one that they can do out of their authority, that it is workable. It would be more efficient if we would remove the uncertainty around carbon and enact a policy that would provide more certainty and more efficient in this transition.

Mr. Rush. Again, commissioner, how will EPA's proposed rule affect investment in renewable energy and energy efficiency resources?

Mr. Norris. It is a much-needed signal to both renewable energy and other technologies that can provide demand side management energy

efficiency and new technologies for generation, that, I think, there is a great hunger, an appetite for investing in new clean air energy technologies. This will help spur more investment which will create more technology opportunities for us to make this an efficient transition.

Mr. Rush. What about nuclear power? With the low price of natural gas, some nuclear power plants are struggling financially. How could the proposed rule help keep those nuclear plants running?

Mr. Norris. Well, again, I think it provides a much-needed signal to the value of nuclear plants because they are noncarbon emitting. It has been a real concern of mine that we maintain our nuclear fleet because it is noncarbon emitting and a solid base load source of generation. So I think the EPA rule will assist in providing a better market, if you will, for nuclear resources.

Mr. Rush. Yeah. Again, commissioner, what do you think about whether industry and regulators can rise to the challenge and achieve the carbon reduction set out in the Clean Power Plan without sacrificing electric reliability?

Mr. Norris. I am sorry?

Mr. Rush. Without sacrificing electric reliability.

Mr. Norris. Without jeopardizing electric reliability?

Mr. Rush. Sacrificing.

Mr. Norris. Yeah, I think, as I said, you are not going to prove it is or isn't going to work because it is still in development. The

key thing is going forward is the communication and cooperation between the EPA, FERC, NERC and all the other entities that we -- everyone wants to keep the lights on, including the EPA. And so what it is going to take is just a continuous effort going toward to make sure reliability needs are addressed if and when they occur.

Mr. Rush. Chairman LaFleur, do you agree?

Ms. LaFleur. I certainly agree that it is going to take a ongoing effort of communication to identify issues that specific states or regions might be having. As with all, I believe, and I testified on MATS before this committee, I said the two things you need for change are flexibility and coordination and that is even more true in this rule. We need coordination to make sure the State plans work and protect reliability.

Mr. Rush. Commissioner Bay, what are your thoughts? Do you agree?

Mr. Bay. I think that there could be challenges.

Mr. Rush. Turn your mike on, please.

Mr. Bay. I am sorry.

I think that there could be challenges, but I think that the challenges are manageable. I would note, for example, that with the 2005 baseline that the EPA used, there has already been a 15 percent reduction in carbon emissions from generators so that an additional 15 percent needs to be achieved over the next 16 years.

And even under the EPA proposal, it estimates that in 2030,

gas-fired generation will constitute more than 30 percent of generation and coal will be more than 30 percent, as well. And with the regulatory certainty provided by the rule, I agree with Commissioner Norris that it will incent innovation. And industry is amazing when they know that there is something to be improved upon and that can result in better or more profits.

Mr. Rush. Thank you, Mr. Chairman.

Mr. Whitfield. At this time, recognize the gentleman from Texas, Mr. Barton for 5 minutes.

Mr. Barton. Well, thank you, Mr. Chairman.

And I want to thank the commission for being here. We rarely have all the commissioners, so that is an honor to have each of you. I was really going to rip Mr. Clark today, but since his two boys are in the audience, I am going to have to give him a pass on that. But no, not really.

I have a general question that I would like each of the commissioners to have the opportunity to answer. You don't all have to, if you don't wish to. With this new EPA carbon rule, would seem to me to be at variance with the FERC's stated responsibility to provide electricity at a reasonable cost. I don't buy the argument that you can close all these power plants and you are going to miraculously replace them with either natural gas, nuclear power or this clean coal technology which really only exists in the laboratory. It hasn't been proven in a commercial scaled-up facility yet.

So, you know, my general question is, can the FERC have any impact to guarantee that we continue to provide electricity at a reasonable cost to the consumer if this rule goes forward?

Ms. LaFleur. Well, thank you, Mr. Congressman.

I do not think the rule itself is inconsistent with FERC's responsibilities. As I see it, the EPA makes environmental rules and those become the baseline within which the system is planned, and we have to make certain that within those rules the rates are done in a just and reasonable way and that we will be paying attention to that as well as paying attention to reliability.

I think all transitions cost money and so the transition to a new resource mix, whether it is because of the environment or because of anything else, to build pipelines, to build transmission is going to cost money. The long run costs are really unknown. They depend on the relative cost of the fuel, and we also don't know the long run cost of leaving climate change, you know, unattended to, which is not free. So, but we will be working to make sure that the transition costs of the pipelines, the transmission, the things we regulate are done in a reasonable way.

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[11:02 a.m.]

Mr. Moeller. Congressman Barton, I agree with Acting Chair LaFleur about we have to react to an environmental rule. I suppose that there is a possibility that EPA could put some kind of a safety valve in from an economics perspective. That is not in the rule right now, but that is a potential. Even they admit that this is going to cost consumers money and raise rates.

The question is how do we transition? And my concern is do we have the right market signals to actually allow for these types of investments, particularly in pipelines, if we are going to expand the gas fleet so much.

Mr. Norris. Thank you, Congressman. First of all I agree with you, there are no miracles here, but we are talking about accounting for all the costs including the external costs. I do have great faith in America's technology innovation. The costs for renewable energy are coming down dramatically in this country. Technologies for a demand site management and energy efficiency are going up dramatically in terms of their capability.

And finally, the fuel costs for renewable energy is zero. We know that is a constant going forward. That gives me great hope that we can make this transition in a very manageable way for the economy. In

fact, a very positive way for the economy because of the world wide market that is out there for clean energy technologies.

Mr. Clark. Congressman, as I indicated in my testimony, FERC has allowed costs that are legally incurred by a business to be bid into the markets themselves. So to the degree that it is just bidding in costs that are otherwise legally incurred, that may not directly implicate FERC markets from a jurisdiction standpoint.

There is potentially though one, what I referred to as a potential jurisdictional train wreck between EPA and FERC, and it would be this; if EPA through the Clean Air Act required utilities to go down the path of environmental dispatches, we've talked about, and depart from economic dispatch, that could potentially be challenging for FERC in this way.

Our authority comes not through the Clean Air Act, but through the Federal Power Act, which requires just and reasonable rates and non-discriminatory rates. We have always judged that by economic dispatch. So to depart from economic dispatch and move to something else could potentially be challenging for the commission, I think.

Mr. Bay. Congressman Barton, I think you raised an important issue, and certainly FERC under the Federal Power Act has to do its best to help ensure that rates remain just and reasonable. I think the commission has taken some actions to examine price formation in the energy markets as well as in the capacity markets that could be very helpful in addressing the issue that you raise.

Mr. Barton. My time is expired, Mr. Chairman.

I want to just make a statement real quickly. In 2005 the then chairman of the FERC, Chairman Keliher, complained to me that FERC didn't have the authority to enforce some of its rules, and we gave the FERC some additional authority. We changed the penalty structure.

That authority has been used in a way that many people think has not been normal due process, so I hope to work with the subcommittee in the next Congress to put in a reform package to provide more transparency and more of a balanced playing field on some of the things that, some of these investigations that FERC has been engaged in, in the last four or five years.

With that I yield back.

Mr. Whitfield. At this time I recognize the gentleman from California, Mr. Waxman, for five minutes.

Mr. Waxman. Thank you, Mr. Chairman.

The world's leading scientists have repeatedly confirmed that climate change is already happening. It is caused by human carbon pollution and will get much worse if we do not act. So, this is a question for all the commissioners. Do any of you believe that there is no need to act on climate change? If any of you believe there is no need to act on climate changes, raise your hand, and I will call on you. Otherwise, I have other questions.

So seeing no one jumping to that bait, it sounds like, all of you believe that there is some need to deal with climate change. Just this

morning the President's Council of Economic Advisors released a new report on the cost of inaction on climate change. They estimate that just one degree celsius additional warming could cost the U.S. economy $150 billion per year. It is getting harder and harder to deny the imperative of action, and we cannot make meaningful progress on climate change without controlling carbon pollution from our largest source, power plants. Several of you discuss of your written testimony the ongoing transition in the power sector as natural gas, renewables and energy efficiency are playing larger roles in meeting our power needs.

Chairman LaFleur, what is driving this shift?

Ms. LaFleur. Thank you for the question, Congressman Waxman. I actually think the biggest driver of change is the abundance of domestic natural gas. Up in New England where we have heard about the challenges of pipelines, there are coal plants that have been under attack by the environmental community for 20 years.

Mr. Waxman. Natural gas is a driving force.

Ms. LaFleur. And second is as has been mentioned, the new renewable technologies and the technological improvements and policy support.

Mr. Waxman. The new renewable portfolio standards, and how about improvements in renewable technologies?

Ms. LaFleur. Yes.

Mr. Waxman. And new environmental regulations?

Ms. LaFleur. Yes, that is the third.

Mr. Waxman. So environmental standards play a role, but we would be facing a shift in the power sector even without these regulations that EPA is proposing.

Commissioner Norris, how do FERC and other involved entities such as regional transmission organizations and State public utilities commissions work to ensure reliability in our power system? Do you try to ensure that generation and transmission infrastructure remain frozen in time, or do you work to ensure that as inevitable changes occur, the impacts on reliability are addressed?

Mr. Norris. The states and RTOs are empowered with that responsibility now and no reason why they would not continue to be empowered with that responsibility, to choose their means, set the reserve margin and choose their means for meeting the adequate resources in the way that best fits their State and their economy. I see no reason that it change.

Mr. Waxman. Chairman LaFleur and Commissioner Bay, do you agree that the goal for FERC is not to stop change, but to ensure that the system responds appropriately as changes occur?

Ms. LaFleur. Yes, I think we have to adapt the part of the system that we regulate as new environmental regulations occur.

Mr. Waxman. Mr. Bay?

Mr. Bay. I agree with that as well.

Mr. Waxman. Now opponents of the Clean Power Plan claim that it is a complete departure from how the power sector has regulated and

will threaten grid reliability.

Commissioner Norris, is this proposal a C change from everything that has come before, or does the plan build on regulatory structures already in place and trends that are already occurring?

Mr. Norris. Referring to the proposed EPA plan as the change?

Mr. Waxman. Yes, EPA plan.

Mr. Norris. No. Like I said, it is a gradual transition that is already occurring. We are already not building coal plants because the science is not changing. We are already having, as Commissioner LaFleur said, the advent of gas coming that is impacting the system, that is as a result of technology, the fracking technology, so science and technology is driving this change, not EPA.

Mr. Waxman. State PUCs, RTOs and ISOs already regulate electricity markets, and along with FERC and NERC, work to assure reliability. The power sector has dealt with many environmental regulations in the past, most recently the Mercury and Air Toxic Standards, and has maintained reliability. The shift to cleaner electricity is already underway. The Clean Power Plan will accelerate these changes and may pose greater challenges, but they are challenges that we already must and will address. I would assume you agree with that, Mr. Norris?

Mr. Norris. Do I agree that we can maintain reliability through this transition?

Mr. Waxman. Yes.

Mr. Norris. Yes --

Mr. Waxman. Chairman LaFleur, and Commissioner Bay, what do you think? EPA's Clean Power Plan is eminently, in my opinion, reasonable and quite modest proposal. It provides tremendous flexibility and ample time to the states and industry to reduce carbon pollution in the least burdensome way possible.

Do you, as Commissioner Norris stated, the question is not whether we reduce carbon pollution, but how, and EPA has an answer embodied in the Clean Power Plan, and that is what they are proposing as a start. So rather than ask that as a question, I want to make that comment.

And, Mr. Chairman, one last thing. The EPA is acting under the Clean Air Act which was adopted by the Congress. They are acting under decisions by the U.S. Supreme Court. There have been five to four decisions that is I have not liked, and there have been five to four decisions that you haven't liked, but Supreme Court decisions are the law of the land.

I yield back.

Mr. Whitfield. At this time I recognize the gentleman from Ohio, Mr. Latta, for five minutes.

Mr. Latta. Well, thank you, Mr. Chairman, for today's hearing, and also to the commissioners for being with us today. It is great to have you all here before us.

And if I could, I would like to start with Commissioner Clark if I may. And what are the implications of the State energy laws and

regulations if they are included as part of an EPA-approved State implementation plan to comply with the Clean Power Plan?

And I just wondered if that could tie into your testimony, where you had mentioned that when you are looking at some of the, when this relationship is occurring, that States might get into a mother-may-I relationship with the EPA that never existed before. Would that tie into that?

Mr. Clark. Congressman, it does. The concern that I raised is I do think there is a risk that this is a rather dramatic change jurisdictionally, and States will at least need to consider it as they decide whether they are going to go down the path of a State compliance plan. The reason I say that is in the past, EPA might just be regulating emission sources either by source or a fleet, but not the entire regulatory regime in an integrated resource plan standpoint that a State might have.

So to the degree that a State goes down the path of creating effectively a carbon integrated resource plan, they will be putting into that things that have traditionally been set by State legislatures, renewable portfolio standards, building codes, energy efficiency standards, in addition to traditional sort of power plant decisions.

To the degree that then becomes bless by EPA and submitted and approved by EPA, it is a much different jurisdictional relationship than has existed before because if a State goes back and decides maybe

the RPS should be 25 percent instead of 30 percent, or maybe our State building codes should be adjusted because something isn't working, in many ways it will have lost that opportunity because it will have become a part of a Federally-approved plan and would then need to seek approval from the EPA, depending on how it is structured to --

Mr. Latta. Let me follow-up. What would that do to costs in those States, especially when you are dealing with a district like mine that has 60,000 manufacturing jobs, and is that going to drive costs up? Is there going to be less flexibility that a State could do in the future? What would happen out there?

Mr. Clark. Congressman, again, I think it is a bit too early to tell specifically because we don't know what the compliance plans would look like or what a Federal compliance plan would look like. I would just point to the trend lines which is in those States that have moved more aggressively and have been first movers on some of these issues, the trend line has been towards increasing electric rate environment.

Mr. Latta. Thank you.

Chairman LaFleur, if I could turn to you, recently I have been hearing that in a number of States in competitive markets, electricity generators and electric distribution companies are seeking State public utility commission approval for the purchase power agreements or the PPAs, as a means to guarantee a contract between the power provider and the regulated utility company.

States are considering these because they are concerned about the

impacts to their retail customers if those plants were to shut down. So the question is, if capacity markets were ensuring reliability and preserving essential base load capacity, then it seems that these PPAs would not be necessary. Are these actions by the State an indication of the market inadequacies out there?

Ms. LaFleur. Well, right now the capacity markets are under a lot of pressure because of all the changes in resource mix, and something that we are looking at very hard is how we make sure the capacity markets properly compensate all the increments that are need for reliability, and I think that will continue to be important, but there will still be a role for the States which regulate generation within their own authority.

Mr. Latta. Let me ask you, when you say that, you know, they might be under pressure out there, what is causing the pressure out there in the capacity markets?

Ms. LaFleur. I think some of the factors I already said. The first is the gas price being very low has really driven down the marginal revenues, so it is hard for some of the coal and nuclear units to recover their costs in the market and other resource changes as well.

Mr. Latta. Thank you very much.

Mr. Moeller, if I could turn to you, in your testimony you were talking about what could be happening out there is we could have higher costs involved out there. When you look at those higher costs again when you look at the States out there like the State of Ohio that is

70 percent generated by coal right now, if you look in that crystal ball down the road, what would happen to States like Ohio for costs when you look at what is happening with the EPA right now?

Mr. Moeller. I wouldn't want to predict how much rates would go up, but, again, even EPA admits that rates will be going up based on this rule. It would depend a lot on how they chose to come up with their State implementation plan. They could go the energy efficiency route, but that gets more and more expensive as you get more efficiency out of the system.

Transition to gas would probably be expensive because a lot of those coal units are relatively low cost. There are other ways to perhaps get there, but, again, this will result in higher rates, which I don't think is denied by anybody.

Mr. Latta. Thank you very much.

Mr. Chairman. I see my time is expired and I yield back.

Mr. Whitfield. At this time I recognize the gentleman from California, Mr. McNerney, for five minutes.

Mr. McNerney. Well I thank the chairman for holding the hearing and the commissioners for your testimony. I congratulate Mr. Bay on your confirmation.

Mr. Moeller, you had an interesting discussion of the pipeline challenge in New England because I assume it is from return on investment concerns of investors, the pipelines wouldn't be fully utilized. What would improve that financial barrier situation?

Mr. Moeller. Well, traditionally the pipelines have been paid for by the local distribution companies with 20 and 30 year contracts. They are the ones selling gas at retail. The new customer base is power plants, and in that market power plants don't know on a daily basis whether they are going to be called or not. They bid in. Sometimes they are taken. Sometimes they are not.

The pipes are basically full in New England. Almost everybody agrees that we need more pipe in New England, but how do you finance it under a new model? There are three proposals out there, one from the governors, one from the investor-owned utilities, and a recent one from a municipal group and we are hoping that part of this discussion can lead to a solution, but it is a concern we don't want replicated in other markets.

Mr. McNerney. Okay. Another question. You mentioned your concern about EPA not having the capability to do the granular analysis needed. I would assume the EPA does have that capability, so basically would you reiterate that you don't think they have that capability?

Mr. Moeller. Well in my opinion, I don't expect them to know electric markets like we do, just like we wouldn't know the details of Clean Air Act either. That is not really their job, but that is why I think we need a more formal relationship because we have the expertise. NERC has the expertise. The people that run the markets do and it is really drilling down into some very detailed engineering analysis, and it can be done.

Mr. McNerney. Well, you and other of the commissioners mentioned that you think one of the requirements for success of the rule, and I think it is cute that it is called the rule, is that you need open and transparent relationship between yourselves and the EPA and also the DOE. How can we achieve that, Chairwoman LaFleur? How can we achieve that transparency?

Ms. LaFleur. Well, I agree that we need an open and ongoing relationship with the EPA. I think the model that we adopted on the Mercury and Air Toxics Rule where we have regular monthly staff calls with the EPA, as well as meetings at the Commissioner level, is one we should follow here. I think we will know much more where the challenges are and what we need to do once the State implementation plans are done.

Mr. McNerney. Do you need a higher authority to make that transparency happen?

Ms. LaFleur. Well, I always love more authority, but I think we have the ability to be transparent within our existing jurisdiction.

Mr. McNerney. Mr. Waxman established that each of you feel there is a need for reduce carbon emissions. What do each of you feel, briefly if you would, would be the most efficient way to achieve that, the rule or some other method?

Ms. LaFleur. Well, I agree with Commissioner Norris that from the standpoint of reducing a pollutant most effectively, a nationwide cap and trade or some sort of nationwide system would probably be the

most efficient. Given the structure of the Clean Air Act that we have, I think the EPA did a good job building in flexibility to use the authority they have.

Mr. McNerney. Mr. Moeller?

Mr. Moeller. Well, because carbon is ubiquitous in its concentration throughout the world, we have got to solve this on a worldwide basis, and I really think we should do it through market forces. As I mentioned in my testimony, getting prices more accurate at the wholesale and retail level throughout the world. Energy is subsidized I think a trillion dollars a year. Those are the kind of things that if we send the right pricing signals, people will use their energy more efficiently.

Mr. McNerney. Okay. Thank you.

Mr. Norris. Thanks. I partially agree with Mr. Moeller. Sending the right price signal is right, but you have got to get the external cost in that price. I think the most efficient way to do that personally is a carbon tax. I am not opposed to a cap and trade, but it takes a lot more pages for you all to right, and a carbon tax would be a lot simpler.

Mr. McNerney. Thank you.

Mr. Clark?

Mr. Clark. Congressman, from my standpoint, research and development is really the key in future energy technologies, and I am a supporter of government-supported research and development into

those new technologies, the idea being that if new sources of energy can be developed in a way that no Nation or no developer would want to do anything but because it is both the cleanest and the most cost effective, then that solves both answers for you, and you don't have to worry about as much government intervention into the markets themselves because on its own --

Mr. McNerney. So that would take Federal or some higher source of funding for that research?

Mr. Clark. There can be all sorts of ways of developing those research dollars, yes.

Mr. Clark. Mr. Bay?

Mr. Bay. At this point 14 seconds or less, I would say innovation. I would say research and development. And I would say markets.

Mr. McNerney. [Off mic.]

Mr. Whitfield. We are always willing to talk about those issues.

At this time I recognize the gentleman from Texas, Mr. Olson, for five minutes.

Mr. Olson. I thank the chair, and welcome to our witnesses. A special welcome to you, Dr. Bay, as our next chairman. Welcome.

As you all know, our grid faces many challenges. You have to coordinate gas with electric power, and sometimes that can be difficult. Wind is plentiful but not at times when we need it, at times we don't need it. Subsidies sort the market and help shutter nuclear

power plants, reliable nuclear power plants and as we have heard today, EPA adds to those challenges.

My first question is for the entire panel. In the Mercury Rule, the EPA included a way to pause the rule if reliability is threatened. It is all called, as you all know, a relief valve. As you all know, too, most of America's grid is run by impartial groups called ISOs. Now, the ISOs are asking EPA to include a reliability relief valve in the carbon rule. Yes or no, do you all agree that this could be a valuable part of the final rule?

Commissioner LaFleur.

Ms. LaFleur. I don't think it could be designed by the reliability safety valve in MATS, but I think there should be a way to consider reliability as a last resort if there is an issue.

Mr. Moeller. I think some kind of a safety value would be very helpful.

Mr. Olson. Commissioner Norris?

Mr. Norris. I apologize. I was not very clear on capturing the question, but if it is a safety valve, I am for safety valves.

Mr. Olson. Yeah. Safety valves, there is one for reliability. And so they want something for you know, a reliability rule in the Carbon rule, some sort of safety valve in the. It is out there for the ISOs. ISOs want to make sure they have that thing. It is part of the Mercury rule. It has been done with mercury. They just want to make sure that, hey, that is a good idea. Can we have that as well, just a safety valve

for reliability as opposed to mercury.

Mr. Norris. Reliability is paramount, and we should do whatever we can to maintain reliability but not use a safety valve to empower people to push back what they are trying to achieve.

Mr. Olson. Commissioner Clark?

Mr. Clark. Congressman, yes, and I think it needs to be one that is done by an independent third party so that they can have greater visibility into the entire grid itself so as the State and regional plans are stitched together, someone independently is able to look at how they all work together and whether it will impact reliability.

Mr. Olson. Mr. Bay?

Mr. Bay. Congressman Olson, I certainly think it is an idea worth considering.

Mr. Olson. Okay, thank you.

My second question is for you, Commissioner Moeller. When power plants close we focus on the number of megawatts lost, but large power plants like coal and natural gas just don't provide bulk power. They also protect the grid with what is called ancillary services.

Unlike wind and solar, they can ramp up or ramp down immediately if needed. They can keep their power balanced at 60 hertz, right there 60 hertz, not 59.99 or 60.001. It is more important than reliability having that power, having the right power. And so my question is, are these EPA rules closing down the most important kinds of power on the grid, ones driven by coal and natural gas?

Mr. Moeller. Well, it is very location-specific, Congressman. I can think of a big power plant in Montana that provides voltage support, a lot of power. If you were to take that out of the grid, it would have big impacts on the rest of the northwest system, and I am sure that that is the case in low pockets throughout the country.

And that is why I think drilling down into the granular nature of the reliability of closing plants is necessary, and we can take EPA's chart. They have projected which plants are going to be shut down, so the reliability study shouldn't be that difficult.

Mr. Olson. Yeah, so one further question. As EPA's second pillar of the carbon rules calls for a massive increase in power from natural gas, but they don't seem to realize that coordinating natural gas and electric power is a very delicate balance, and even worse now, the environmental groups are attacking the Using Greenhouse Gas Rule to try to turn around and stop FERC from approving natural gas pipelines. You can't have natural gas without the pipelines.

And so my question is, do you think EPA understands how difficult some of these assumptions are? Are they realistic?

That is for you, Mr. Moeller.

Mr. Moeller. I don't think they fully appreciate the challenges we have with getting more pipeline infrastructure. At least I haven't sensed that they do, because as I noted in my testimony, this set of new consumers of pipelines as power plants, not the traditional ones, local distribution companies that have provided the financing through

long-term contracts, and we have got to address that and solve that issue or else the assumptions on pipeline expansion, I think, will be faulty.

Mr. Olson. My time I yield back. Thank you.

Mr. Whitfield. At this time I recognize the gentleman from Texas, Mr. Green, for five minutes.

Mr. Green. Thank you, Mr. Chairman.

I want to thank our commissioners, both new and old, for testifying today.

Reliability of transmission electricity is the backbone of our economy. Our industrial, commercial, and residential customers never need to question whether the power they need will be delivered when they need it. It is FERC's responsibility to maintain the reliability of the grid and FERC has quite a few other responsibilities, including pipelines, LNG facilities, and oil pipeline rates, to name a few.

Chair LaFleur, in your testimony you gave EPA's Mercury and Air Toxic Standards, or MATS, you state that EPA sought the advice of FERC upon the issuance. You stated that FERC issued a policy statement on potential violations MATS may induce based on FERC's reliability standard. Did the EPA respond to that, to FERC, and what you submitted?

Ms. LaFleur. Yes, Congressman Green. The EPA, in fact, we based our policy statement on a policy guidance memo they put out that indicated that power plants could seek a fifth year to comply with the advice of FERC and other reliability experts. Thus far we are just

in the fourth year, so we haven't had any fifth year applications, but we anticipate a few.

Mr. Green. Well, Congressman Olson and I actually have passed a bill through the House that doesn't deal with FERC but deals with EPA and the Department of Energy, H.R. 271, that deals with the conflict that exists between EPA and the Department of Energy. That bill passed the House, and it may emerge sometime in a different form over in the Senate, but it also puts reliability as the most important.

Because again, I am from Texas, and Houston right now where it was 99 degrees when I left last week, and so reliability is important for our air conditioning to run in the summer just like it is for heating in the north in the winter.

Given the increasing complexity of EPA's regulations, does FERC anticipate additional conflicts with reliability?

Ms. LaFleur. I believe it is our responsibility to make sure that reliability is sustained. I think we will know much more when we see the different State plans, but there will undoubtedly be issues to work through as we work through the transformation, that is what we will do.

Mr. Green. You also discussed EPA's proposal and gas pipeline adequacy in your testimony, stating FERC emphasized capacity factors and existing constraints. Do you believe EPA adequately incorporated FERC's input?

Ms. LaFleur. I think EPA referenced in the rule the considerable

need for new pipeline capacity to facilitate the Clean Power Plan, but it is going to be up to us to help get that pipeline capacity in the ground.

Mr. Green. Okay. Do you anticipate FERC's handling increased permitting requests for natural gas pipelines if States choose the EPA's regional policy option, which since FERC is a national agency.

Ms. LaFleur. I think our pipeline work will continue to grow for a number of reasons, yes.

Mr. Green. Okay.

Director Bay, until you are at least sworn in, as Director of Enforcement in your office and responsible for violations and inquiries in market manipulation, however unlike other Federal agencies, FERC does not have an office of compliance or any other resource or regulated community to address questions and concerns. Mr. Bay, do you believe that the office of compliance would benefit the regulating community, someone to just call and say we are looking at this option before it ends up in enforcement action?

Mr. Bay. We actually tried to do that, Congressman Green. There is a no action letter process whereby an entity can submit its question to FERC for consideration by staff on whether or not there would be a violation if the entity engages in a certain form of conduct.

In addition, we have a help line that is staffed to answer questions from the regulated community. And certainly we are often speakers at conferences in which we --

Mr. Green. Okay. I only have about 40 seconds left, but I am concerned that maybe we could use some more transparency on the enforcement and maybe an additional office of compliance.

Let me get to my last question. Mr. Clark, EPA's rule seems to assume transmission grade will not require much, if any, changes as a result of retirements, decreased margins or renewable sources whether they be large or small. In different regions of the country, what entities are responsible for building and maintaining new and existing transmission, and what challenges are they going to face under this new EPA model?

Mr. Clark. Congressman, there can be different entities in different parts of the country, either incumbent utilities or competitive utilities that are attempting to get into the transition business. Who plans that and makes the calls differs substantially in different parts of the country, and in more regulated, less restructured regions of the country, like the southeast and most of the west, it tends to be still traditional monopoly and vertically integrated utility companies regulated by States. In more market regions of the country, it tends to be probably an ISO or an RTO.

Mr. Green. Okay.

Thank you, Mr. Chairman. I know I have run out of time.

Mr. Whitfield. At this time the chair recognizes the gentleman from Virginia, Mr. Griffith, for five minutes.

Mr. Griffith. Thank you, Mr. Chair.

Ms. LaFleur, if I understood your testimony earlier, and I wrote down part of it but I don't want to put words in your mouth, given the structure of the Clean Air Act that we have, the EPA I think you said did a good job or something similar to that. I got it to that point and then I couldn't write fast enough. Is that an accurate statement of your opinion?

Ms. LaFleur. That is basically what I said. The question was what's the most efficient way to regulate carbon, and given the authority they have --

Mr. Griffith. Yes, ma'am. That wasn't my question. My question is, is that a statement of your opinion that the structure of the Clean Air Act that we have, under the structure that we currently have, the EPA did a good job in coming up with these regulations?

Ms. LaFleur. Yes.

Mr. Griffith. And so then I would ask you to reconcile for me when you take a look at Section 111 of the Clean Air Act where in Section D it says, the Administration shall prescribe regulations which shall establish a procedure under which each State shall submit to the administrator a plan which establishes standards of performance for the existing source for any air pollution for which air quality criteria have not been issued or which is not included on a list published under Section 108 A, and the critical part, or emitted from a source category which is regulated under Section 112 or 112 B.

And how do you reconcile that with the fact that electric

generation units are currently regulated under 112, and therefore the EPA does not appear to have authority under the Clean Air Act to propose the regulations which they have enacted, and what they are relying on is a scrivener's error that took place in the redraft in, I believe, 1990, but in a case which I would cite for you all to go back and look at with your lawyers, in a case New Jersey v. EPA 517 F.3d 574, 2008, it appears that the EPA acknowledged that they didn't have this authority.

And the court ruled accordingly in view of the plain text in structure of Section 112, we grant the petitions and vacate the delisting rule, which was a previous lawsuit. This requires vacation of cameras regulations of both new and existing EGUs, electric generation units. EPA promulgated the camera regulations for existing EGUs under Section 111(d), but under EPA's own interpretation of the Section, it cannot be used to regulate sources listed under Section 112.

So it is not just my reading, but apparently the EPA in a court case made that same reading, and the EPA thus concedes that if EGUs remained listed under Section 112, as we hold they do, then camera regulations for existing sources must fail. So it would appear that the EPA is reaching way out, and under the existing law I would submit they don't have the authority and that they are asking for litigation.

Doesn't that make your job harder in trying to figure out where you are going to go when the EPA is stretching the law so far that they

disagree currently with the decision of the court that they conceded was the correct reading of the law as late as 2008? Yes or no.

Ms. LaFleur. The legality will be decided by the courts, but we are going to do our job to try to keep the lights on in the meantime.

Mr. Griffith. And I appreciate that you all are going to try to keep the lights on, and that brings us to this whole pipeline issue and I worry about the EPA and folks filing lawsuits on trying to lay down new pipeline to get it to the power sources, and all of a sudden we have EPA regulations coming in and saying to us, wait a minute, wait a minute, you can't put the pipeline there, or we have lawsuits that last longer.

And, Mr. Norris, you said earlier you were confident in the American innovations and so forth, and I am too. The problem is the EPA apparently is so confident they believe that we can get it done in two years. We know from the Department of Energy, and I sometimes wish that all of you all would sit down and talk on a regular basis. The Department of Energy has told us the new clean coal technology will not be available for approximately ten years even if what we are working on now works, and I think there is some really exciting things. I love chemical looping, but we are looking at ten years. I think with some money we might be able to shorten it to seven years.

But under these proposed regulations, assuming that they go into effect, the States have to come up with their plan. Even though they have ten years to hit their target, their plan has to be completed with

one year. That doesn't seem very reasonable to me. Do you believe that States really can come up with a plan not knowing where the pipelines are going to be, not knowing what technology is going to be available that can hit all of these very rigorous standards, come up with the plan now for ten years later? Yes or no. Thank you.

Mr. Moeller. I do.

Mr. Griffith. Thank you. You do.

Well, we only have five minutes, so I got to hurry to get it all in. I got more than I can handle here.

Somebody said earlier it is not the EPA regulations that are putting the coal power plants out of business; it is the price of natural gas. The problem is, is that coal and natural gas compete about even at $4 a unit, and for most of this year, it is true in the last week or so it has dropped back down under $4, but for most of 2014, the natural gas price has been over $4.

And so if it is not the price, I would submit to you all it must be EPA regulations which are in fact killing jobs across this country, and we are doing it at a time when this country can't afford it. The people in my district can't afford it. The consumers are the families of the middle class America. We are the ones being hurt. It is great to have all these lofty ideas, but I don't see it working, and I fear that we are going to have rolling brownouts in the future, and I fear that you all are going to have a really tough job because of these EPA regulations.

And with that, Mr. Chairman, I see my time is up, and I yield back.

Mr. Whitfield. At this time I recognize the gentlelady from California, Ms. Capps, for five minutes.

Mrs. Capps. Thank you, Mr. Chairman, and to all of the commissioners, thank you for your testimony today.

Despite what some have argued, it is clear to me that EPA engaged in unprecedented outreach in developing its Clean Power Plan. EPA met with public utility commissioners, grid operators, and utilities of all types among may others.

Chairwoman LaFleur, to emphasize it for the record, I would like to ask you about EPA's outreach to you and to FERC staff. In your written response to questions posed by the majority, you indicated that FERC staff met with EPA staff on several occasions while the proposal was being developed. Is that correct?

Ms. LaFleur. Yes, it is, Congresswoman Capps.

Mrs. Capps. And during these conversations, did FERC have an opportunity to flag issues that you all believed that EPA should be considering while developing their proposal?

Ms. LaFleur. Yes.

Mrs. Capps. Thank you.

As far as you know, did anyone at FERC tell EPA that the proposal would significantly undermine reliability.

Ms. LaFleur. That was not the sum of our advice. As I said in my testimony, our staff really emphasized that the pipeline and

transmissions would need to be there to facilitate the plan, that that was a key driver as well as a need for regional cooperation.

Mrs. Capps. Thank you.

Another topic. One of the written questions from the majority asked whether FERC prepared the resource adequacy and reliability analysis that EPA released with the proposed rule. Would FERC normally prepare the supporting documents for another agency's rulemaking?

Ms. LaFleur. Not to my knowledge. I think that was prepared at EPA.

Mrs. Capps. So there is nothing unusual about EPA conducting its own supporting technical analysis for a proposed rule?

Ms. LaFleur. I honestly don't know what their normal practice is, but they did not come to us for that.

Mrs. Capps. Thank you.

And again moving on, we have heard arguments that FERC should immediately complete an independent reliability assessment of EPA's proposal. Chairwoman, in your testimony you indicated you don't think it makes sense for FERC to prepare such an analysis at this time. Why is that?

Ms. LaFleur. First of all, the rule is just in draft, but even if the rule were final, the way it is structured, there is 49 different States, have to come up with plans using four different building blocks, and some of them will do it on a State level, some regional, so there would be so many combinations and permutations we would need to go

through, I think it would be more productive for us to focus on doing our jobs of getting the infrastructure built and then zero in if there are issues in a State.

Mrs. Capps. Thank you.

Again moving on, our power sector is already transitioning towards energy efficiency and renewable energy, and EPA's Clean Power Plan will accelerate that transition. That is my summary of it. If regulators in industry do the necessary planning and maintain focus on implementing the S? Rules targets, is this transition manageable, and can you elaborate on that a bit?

Ms. LaFleur. I think on balance it should be manageable. As I said, I think there is a lot of infrastructure we need to get built, and we need to have a process if there are specific issues. But from what I hear, many of the States are already well situated.

Mrs. Capps. Thank you.

You know, Mr. Chairman, I think it is clear that EPA sought and received FERC's input on the development of the Clean Power Plan, and that EPA will certainly continue to seek FERC's input as it finalizes the rule as it moves from the draft into the final rule stage. EPA's Clean Power Plan is a critical step to reducing carbon emissions and combatting climate change, and I hope we can all work together in the various agencies and Congress to ensure that these rules are as strong and as effective as possible.

And I know I have a minute left, but I am prepared to yield back.

Mr. Whitfield. Gentlelady yields back.

At this time I recognize the gentleman from Illinois, Mr. Shimkus, for five minutes.

Mr. Shimkus. Thank you, Mr. Chairman.

Again, welcome. We are actually glad to have you here, and I missed some of the impassioned questions, but the reality is there are people in coal countries of this nation that since this Administration was elected there has been a war on coal.

And I always refer people to President Obama's then meeting with the editorial board of the San Francisco Chronicle in 2008 when he said, I am just going to make it so costly to use coal, that they will move out of the market and I think we are living in that world. Your job is living in that world, how do we keep the lights on.

And I also would hope that your job would be trying to make sure there is enough base load and that we have competitive prices because if prices go up, then the whole economy is challenged by that. But the passion is sincere for those people who live in coal country and have the majority of their generation from coal-fired power plants.

Now I am from Illinois, so we have a big nuclear portfolio, too. We are fortunate in that, but I would say nuclear power is challenged today also.

So, Chairwoman LaFleur, I filed this question, and in your statement you talked about the FERC staff working on the operational grid, pipeline, transmission, regional cooperation, and I understand

the work that commission staff has done, but I was intrigued by Commissioner Moeller's statement when he talked about requesting a more formal role.

Commissioner Moeller, can you explain to me what that means, and maybe that might address some of these questions about how much time, who is reviewing, who is making decisions. And what do you mean by a more formal role?

Mr. Moeller. Well Congressman, as Acting Chair LaFleur mentioned there were meeting between FERC staff and EPA, but it is kind of up to whoever heads the agency as to whether that information is going to be disseminated.

Now, to her credit, she did. But I like these issues. They may not be very glamorous, but they are very important in terms of the reliability implications of transitioning this fleet in a very short amount of time.

And so I don't want to endorse staff meetings and paperless meetings. I would prefer a more formal open, transparent process, where frankly we can get engineering expertise which will often probably disagree amongst themselves as to the reliability implications, and I don't think it is that hard because EPA even gave us the list of power plants that they project to shut down. So the information is out there courtesy of EPA.

Mr. Shimkus. So in that statement, and not trying to sow discord, but it is your opinion that there hasn't been an open, transparent

system?

Mr. Moeller. I was never invited by EPA to either review the proposal or comment on it. It was done strictly --

Mr. Shimkus. Let me ask to all the commissioners here and the acting Commissioner, was anybody else invited to any of these meetings with the EPA? Obviously the commission, the staff is yours, but --

Ms. LaFleur. There is two different things going on. In the interagency review process, we were under strict confidentiality requirements about Xeroxing and releasing information, although I did offer the excerpts to all of my commissioner colleagues. Now that the rule is out, we can have all the open meetings we want.

Mr. Shimkus. And I only have a minute left. So I know Commissioner Moeller, you weren't. Commissioner Norris, were you involved in any of this prior?

Mr. Norris. Well, I was involved --

Mr. Shimkus. Or Commissioner Clark?

Mr. Clark. No.

Mr. Shimkus. Commissioner -- you weren't around yet. So welcome, I guess I should say.

And I will just end on this, again we appreciate it. You all know where we stand. I talk to a lot of people in the generating sector, and I was involved with public policy that moved us to competitive generating facilities instead of a, in regulated markets. I think there is now a question under this new regime of is it better for

reliability, do you go back to regulated markets? How are merchant facilities going to survive?

Commissioner Clark, you are shaking your head. Do you want to comment real quick, and then I will end on that, Mr. Chairman. Thank you.

Mr. Clark. Congressman, you raise an intriguing point, and one that I have thought of from time to time, which is there is the potential in some restructured markets to have, to the degree that you are requiring a State-led basically integrated resource plan to be put on top of the market construct, that it is a form of almost soft re-regulation in some of those markets that had traditionally been trending in a much different way in a restructured environment.

Mr. Whitfield. At this time, I recognize the gentleman from Pennsylvania, Mr. Doyle, for five minutes.

Mr. Doyle. I thank my friend.

Commissioners, thank you and welcome. You have provided a great deal of insight and thought, and your responses to the majority's written questions were certainly exhaustive.

We are embarking on a fundamental shift in our energy sector, and I share the goal of reducing emissions of greenhouse gasses that are contributing to climate change, but we have to do it in a way that is prudent. Traditional energy sources, nuclear, coal, they are still going to play a critical role in ensuring reliability, and as we move forward towards supporting cleaner types of energy, we have to make

sure we have the capability and the infrastructure to support them. The most recent proposed rule from the EPA on existing power plants is going to force a sectorship with a fairly expedited time frame, and the impact is real, particularly in my home State of Pennsylvania. So I appreciate your time today as we continue this critical conversation.

Chairwoman LaFleur, let me ask you, as you know, the 111(d) proposed rule includes both binding interim goals beginning in 2020 and final compliance goal in 2030. Now, if there is no hiccups or delays or extensions, many States will have their completed plans in place by hopefully 2017.

By 2020, my State, Pennsylvania, will have to reduce its carbon emissions from the 2012 baseline by 28 percent. That is just three years to make a 28 percent reduction. This will require swift action from utility planners, rather than long-term planning that could ease reliability concerns.

My question is by keeping the 2030 compliance goal in place but allowing States to determine the appropriate interim glide path, could EPA achieve the same carbon reduction goals while providing utility planners the necessary timeline to avoid reliability impacts and unnecessary stranded assets, and is this an approach that FERC would support?

Ms. LaFleur. I would want to think more about that, Congressman, and perhaps take it as a question for the record. It is not something that we discussed with EPA during the process. I do think that your

State is well served -- Pennsylvania has the advantage of being well served with gas pipelines and also being close to a region that -- being in a regional transmission organization where there might be regional solutions that would both afford more time and more options to the State; but, of course, it is not up to me to make their plan.

Mr. Doyle. Let me ask all of the commissioners. A recent Brattle study noted that looking at forward market prices and recent five-year cost trends, about half of merchant nuclear plants are not profitable. This is not a future problem. This is a problem that is staring at us right now today.

What happens to reliability if nuclear plants retire, especially when you factor in the number of coal plants shutting down because of EPA's MATS rule and the fact that the remaining base load coal fleet is under the same market pressures as nuclear? It seems to me that this is a real problem today long before the rule could impact the grid. What are the RTOs doing, particularly PJM in my area, to address this problem today?

Ms. LaFleur. Well I think it would be a problem if we lost our nuclear fleet. It is a very important part of our fleet. PJM, as well as FERC, are looking at both the capacity markets to make sure they properly compensate the reliability contribution of base load plant, as well as Commissioner Moeller referred to we are looking at price formation in the energy markets to make sure that those plants are getting fair market prices to support them.

Mr. Doyle. Would any other of the commissioners like to make a comment on that?

Mr. Moeller. Congressman, your specific question about what happens if we lose the fleet, the entire fleet would be devastating because it is so important to our grid. Individual plants, it really depends on the load pocket involved, and I know that New England is struggling with the closure of Vermont Yankee, and there are lots of ramifications of that.

But as Acting Chair LaFleur noted, both the RTOs and as a commission, we are looking at ways to better compensate the reliability implications of on-site fuel and trying to get the prices right in the price formation effort, which will better compensate those units.

Mr. Doyle. I am trying to understand when EPA says that the rule will preserve at-risk nuclear plants, how exactly does that work? I mean how will they preserve at-risk nuclear plants, and how soon does that happen?

Mr. Clark. Congressman, I share your concern. I think the answer is easier in certain regions of the country than others. If you come from a region that still happens to be a State-regulated monopoly, vertically integrated utility environment, it is probably less of a concern in that those public utility commissions can build in some of the those base costs into base rates.

In market regions of the country though, you are exactly right. We are struggling with that issue where there doesn't seem to be enough

revenue from the market to support some of these, what I think most people acknowledge are very important nuclear plants.

Mr. Doyle. Thank you.

I see my time is up. Thank you, Mr. Chairman.

Mr. Whitfield. Thank you.

At this time I recognize the gentleman from Texas, Mr. Burgess, for five minutes.

Dr. Burgess. Thank you, Mr. Chairman. Welcome to our commissioners. We are really so grateful you spent the time with us.

Mr. Moeller, let me ask you a question because you caught my attention in your opening statement and of course you were talking about the commission has a responsibility to promote the reliability of the Nation's bulk power system, and then you specifically referenced heating and cooling. We talk a lot in this committee about public health concerns, about things. I mean, that is a major one, isn't it? We forget about, I mean, everyone understands that there can be cold-related deaths, but heat-related deaths actually can be more significant, at least in my experience.

Mr. Moeller. Absolutely. We talk about the lights staying on, which is great, but it is really heating and cooling that keeps people alive during extreme weather events, and particularly in your State, it gets mighty hot.

Dr. Burgess. Well, and even in States where it is not. I mean, we saw in France in 2003, when I forget the number, but I think it was

in excess of 10,000 deaths during a heat wave that they had in France that they were unprepared to deal with, so it can be substantial. The effects on public health can be substantial.

You know, I think you point out in your testimony that the Federal Power Act restricts the duties of the commission, the authority to regulate interstate electricity transmission, wholesale electricity prices, and leaves the questions of electricity generation and intrastate distribution to the States, but with the proposed Clean Power Plan, this separation seems to be changed and puts the EPA in control of intrastate electricity matters.

Is that concerning to you as commissioner of the FERC that the EPA is claiming authority through really the regulatory process that Congress did not grant to you as a commission through statute?

Mr. Moeller. I think Commissioner Clark may want to elaborate more specifically to that point. But, I try to point out the fact that these are interstate markets, and if you impose a State-by-State enforcement solution, that is very challenging, particularly when you have States that, for instance, Idaho, that consumes a lot of coal-generated power but doesn't actually produce any within their State. The baseline how it works now going forward, very challenging.

Dr. Burgess. Commissioner Clark?

Mr. Clark. Sure. I would just reiterate what appeared in my presubmitted testimony, which is, just that this is a big change potentially as States enter into these compliance plans wherein they

may be putting into the compliance plans all sorts of integrated resource planning type mechanisms like renewable portfolio standards and efficiency codes, as well as decisions that their State public utility commission is making and then seeking approval of those from the EPA.

To the degree that they later try to change that, depending on how inflexibly that is written in their particular compliance plan, it could cause issues where they later need to go and seek approval from the EPA, or if they depart from that, subject some entity in their State, either a generator, the State itself, to either an EPA complaint in enforceability, or even private citizens lawsuits against the plan that they have locked themselves into. So it is a jurisdictional issue that I think States will need to think about as they work through this process if the rule is upheld.

Dr. Burgess. They need to think about it, but it also strikes me that they may not have, I don't know. Are they going to have the protections that they need in order to do their job.

I just have to say as a father and a grandfather, I admire the forbearance of your sons to hang with you through this. I don't know what you promised them, but I suspect it must be substantial.

Mr. Clark. Thank you. I have a seven-year-old that is at home that we didn't risk this with.

Dr. Burgess. So noted.

Let me just ask you a question on, the reductions in actual

capacity, the EPA seems to assume a reduction based on efficiency measures.

The EPA really cannot force citizens, though, on their purchase of electricity or power, so how can the EPA rely upon reductions in usage based upon efficiency without the ability to mandate how much power is consumed or not consumed?

Mr. Clark. Congressman, I think what is envisioned by the EPA's plan is that that is the sort of thing that would go into a State compliance plan. It does raise the question about, in my mind, who would be the entity that EPA would then enforce that standard against?

An energy efficiency measure is not like a power plant that EPA can go in and specifically tell to ramp down or up. If there is something that is not being met in the State energy efficiency goal, who would be the compliance entity that is targeted? Would it be the State itself, the installers of the energy efficiency? I just struggle a little bit to understand in the context of the Clean Air Act exactly how that would be enforced, but I appreciate the question.

Dr. Burgess. And I appreciate the very provocative answer in the form of a question.

Thank you, Mr. Chairman. I will yield back.

Mr. Whitfield. At this time the chair recognizes the gentleman from Georgia, Mr. Barrow, for five minutes.

Mr. Barrow. Thank you, Mr. Chairman. I want to talk about something we haven't talked about much today. To fully develop and

deploy renewable energy in some remote areas is going to require infrastructure upgrades to get that energy from where it can be generated to where it is going to be needed.

And I know until 2011, the rule was pretty set. Infrastructure upgrades had to be paid for by those who were going to benefit from them. There was a direct benefit test. Back in 2011, you all released a regulation, it is called Order 1000, that basically proposes to broaden, to reallocate the cost of infrastructure upgrades to allow for the greater development of renewables in remote locations by spreading it across a broader base, including folks who won't benefit from it, won't consume the energy that is being produced.

Now, personally I am all for them paying the cost who get benefits, myself. But I want to ask each of you all, and direct this question to each of you in turn, what do you say to folks who are skeptical about spreading the cost of infrastructure upgrades beyond the base of those who are going to benefit directly from it?

Ms. LaFleur. Well, order 1000 preserved the principle that those who benefit are the ones who should pay for transmission. But it suggested a new type of benefit beyond reliability, which is well understood and why you build transmission. Economic benefits of reducing congestion, getting a cheaper power by building transmission.

And the third was enabling States to comply with State laws such as buying renewables, so the premise of the rule is that if a State passes a law requiring extra set renewables, then the transmission to

facilitate compliance with that law does benefit that State. So it is a different type of benefit but still one that we believe the people who receive the benefit should pay.

RPTS ZAMORA

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[12:01 p.m.]

Mr. Barrow. Commissioner LaFleur, am I correct in understanding, then, that a State like Georgia, which does not mandate the purchase of renewables in a certain quantity would not in any way be required to subsidize or contribute to the cost of upgrades elsewhere in order to provide for the --

Ms. LaFleur. That is correct. Georgia would be part of a region, there is a southeastern regional planning and only Federal, State and local enacted laws and regulations would be public policy requirements around which transmission had to be built. So if Georgia had no renewable requirement, they wouldn't have to build for renewable requirement.

Mr. Barrow. How about you, Commissioner Moeller, do you agree?

Ms. LaFleur. Excuse me?

Mr. Barrow. How about you, Commissioner Moeller, do you agree?

Mr. Moeller. There are parts of Order 1,000 I supported, parts that I wasn't supportive of it is in the courts now. But generally speaking, the concept of beneficiary pays is one that we try to embrace. The challenge with these assets is that they are often 30, 40 or 50-year assets and the power flows change and so who is paying for them now, other entities can benefit. So there is some art and there is some

science in cost allocation. It is difficult, but most importantly, we want to get it built.

Mr. Barrow. Commissioner Norris, do you think those who pay bills --

Mr. Norris. Yes, the board supports the principle beneficiary pays, and I agree with both the previous commissioners. This is not an exact science. But, you get reliability benefits, you get economic benefits, and you get the access to renewable energy where it shows and by that plan. I would just add to what Commissioner LaFleur said is that the public policy only acquires that that be considered in the regional plan. It does not require that that be a part of the plan. It only enables public policy considerations to be a part of the process but does not require them to be in the plan.

Mr. Barrow. And what does that mean for folks who are served by companies that don't --

Mr. Norris. That means the regional planning process has to have in their planning process, a mechanism in which public policy laws or requirements get on the table for consideration. It doesn't require that they be adopted in the plan, only that there is a process by which they get considered.

Mr. Barrow. Commissioner Clark?

Mr. Clark. I would agree that the concept of beneficiary pays is a sound one. There have been a number of cases, Order 1,000, which I, too, have agreed with parts and disagreed with parts, but also

specific cost allocation cases that have been taken to court, some of which I have agreed with, some of which I have not.

I think the courts are beginning to hem in the commission in terms of what is considered within bounds and what is considered without, outside of the lines. In a recent MISO case, it determined that the commission had made a sound judgment in terms of beneficiary pays and I thought the court was right. In the case of a recent PJM case; the commission had decided it was outside of the bounds and had not tied down that beneficiary pays analysis enough, and I agreed with the court in that case, as well.

Mr. Barrow. Commissioner Bay, last word.

Mr. Bay. The only thing I would add is that the 7th Circuit has said that the cost must be roughly commensurate with the benefits, and the commission has adopted that principle, as well in Order 1,000, and also has said that if you don't benefit, you don't pay.

Mr. Barrow. Thank you.

My time is up.

Mr. Whitfield. Time has expired.

At this time, recognize the gentleman from Pennsylvania, Mr. Pitts, for 5 minutes.

Mr. Pitts. Thank you, Mr. Chairman.

The Administration's Clean Power Plan that we are reviewing here today provides four emission reduction strategies, fuel switching from coal to natural gas is a potential component of two of these strategies.

One advises the coal firing of coal plants with natural gas or outright conversion to natural gas firing; the other involves increasing the dispatch rate for natural gas combined cycle power generation units. Pipeline companies are expanding their infrastructure to meet demands for clean burning natural gas, and in Lancaster County, which I represent, there is a proposal for a new line that would run through most or some of the most pristine farmland in the Nation.

Chairman LaFleur, I have two questions relating to this. Since many other communities will see similar projects in the coming years, what procedures do you have in place to make sure environmental concerns and the rights of property owners are given full consideration when reviewing these proposed roots for pipelines? And secondly, do you believe the Clean Power Plan would lead to a proliferation of new pipelines across the country?

Ms. LaFleur. Well, thank you for the question, Mr. Congressman.

The way our pipeline approval process works, we do a complete review of the environmental safety and community aspects, which includes scoping meetings, opportunities for public comment, open houses in communities around the pipelines. We are often asked why the process takes so long, and it is because of all the opportunity for comment that are fed into the process. I do believe we will have more pipelines as a result of the greater utilization of gas, but they have to be built with sensitivity to the concerns of the people whose

communities we are crossing.

Mr. Pitts. Commissioner Moeller, right now, some States average a natural gas utilization rate in the single digits. Given that the EPA assumes that an average 70 percent utilization rate for natural gas is feasible, do you think that many States may fall short in this goal and that many consumers will simply be left with a larger electricity bill?

Mr. Moeller. Well, I think it would be extremely challenging, Congressman, to reach those 70 percent levels, generally. I will be looking forward to the comments on the rule that talk about particularly the operational aspects of that aspiration, and we will need to get the pipeline in place.

And the question is, does the timing of a new pipeline sync up with the enforcement timeline?

Mr. Pitts. Commissioner LaFleur, my understanding is that the proposed rule factors in new nuclear plants but only factors in 6 percent of the existing nuclear plants; in other words, if an existing nuclear plant shuts down, the impact on a State's ability to comply is limited to 6 percent of the energy that comes out of that plant, which doesn't seem like much of an incentive to take actions that will value the carbon-free energy that nuclear plants provide all day, every day.

Don't you think customers benefit from having plants that have 18 to 24 months of fuel on site, particularly when those plants can

run at 97 percent of their capacity even during conditions like the polar vortex or the hottest day of the summer?

Ms. LaFleur. I think nuclear plants bring a lot of benefit to customers, including reliability benefits, the fuel security you mention. I don't believe that the EPA mandated what percentage any State could or could not rely on nuclear. That was a building block that was put out that a State could put together. If a State wanted to rely more on nuclear, less on something else, my understanding of the plan, it would be allowed.

Mr. Pitts. Mr. Moeller, would you like to comment?

Mr. Moeller. Well, I have talked to a few nuclear companies about it, and I think they are still analyzing it, but there is one train of thought that despite EPA's intention, that the 6 percent could actually be counterproductive to nuclear. It has to do with the calculations and replacing it with gas to meet your baseline better. But it is certainly worthy of further discussion. I admire EPA's attempt to try and booster the nuclear units, but there is a train of thought that actually could be counterproductive the way they proposed it.

Mr. Pitts. I yield back.

Mr. Whitfield. Gentleman yields back.

At this time, I recognize the gentleman from Kentucky, Mr. Yarmuth for 5 minutes.

Mr. Yarmuth. Thank you, Mr. Chairman.

And thanks to all the commissioners for this discussion. I think it has been a very thoughtful and interesting one.

I want to thank the chairman, my fellow Kentuckian, for returning us to the days of yesteryear with the discussion of Waxman-Markey, which, by the way, did not become law because a Republican minority in the Senate wouldn't let it become law, because it did have a majority of votes in the Senate after passing the House. But when I was considering whether to vote for that bill or not in the House, my primary concern was how it would affect the cost to my consumers, both business and residential.

And I talked to a lot of the businesses, all the big users of power; they were all kind of either for it or neutral on the bill. And then I talked to our utility company and asked them how it would affect residential rates, and they said that they projected that over 10 years the average residential user would experience a rate increase of 15 percent if they did nothing else, and so they didn't engage in any conservation practices.

And I think, understandably, this hearing is focused on the supply side of the energy equation, but the demand side of the energy equation is also critical to our ongoing consideration of our energy future.

And Mr. Norris, you talked about innovation primarily on the supply side, but there is an incredible amount of innovation going on on the demand side, which is going to affect supply and whether or not we have adequate energy in the future. So when we talk about rates,

rates don't necessarily mean billing amounts, is that correct? And there are huge amounts of the things going on out in the world of innovation right now which could dramatically affect what the bills are regardless of what the rates are. Is that not true and would you elaborate on that?

Mr. Norris. Very true. The chairman of our State commission, we had a utility, MidAmerican, who hadn't raised rates over 10 years, but I got complaints all the time about people's utility bills going up, and it is very simple: You are plugging more stuff in and turning more stuff on. So the demand side is a very important part of this equation.

As I said in my written testimony, the deployment of smart grid and smart meters are already taking place, and that continues to be a technological innovative area where we can do a lot more to make our consumption of electricity much more efficient, and we should.

Mr. Yarmuth. And, I mean, I am not aware of any decent-sized business that is not very much focused on reducing their energy costs and doing the types of things, whether it is turning their computers off at night or whether it is putting solar panels on their roofs or doing any number of things to reduce those costs.

Have you seen examples of, you know, can you kind of gauge what the opportunity in terms of utilization reduction on the demand side would be because of technology, just current technology right now? How much can an average business save by implementing -- or an average

homeowner save by implementing some of the techniques that already exist?

Do you have an estimate on that?

Mr. Norris. How much is the potential, you say, for demand side reduction? Well, no, I don't have a number. I know that there is still a great opportunity for putting price responsiveness and demand response in both our retail and wholesale system. For consumers to get the right price signal, putting elasticity in our demand curve, I think there is a great potential, but I don't have an exact number for you.

Mr. Yarmuth. Right. And we know that, for instance, rates on solar panels have come down approximately 75 percent just in a matter of 5 years or so. So it is reasonable to expect that those kinds of technologies will make it much easier for consumers and for businesses to keep their cost in line, their energy costs in line, even if rates happen to rise at some significant rate.

Is that not true, Ms. LaFleur?

Ms. LaFleur. Yes, that is definitely true. And much earlier in my career, I used to run conservation programs for an electric company and there are a lot of things that businesses and residences can do, first of all, when they build in the first place to build inefficiency, but also retrofitting, lighting, motors and so forth.

Mr. Yarmuth. Okay. And we are actually seeing that in the automobile segment of the energy industry, too. Innovation has now

vastly increased the amount of mileage, and unfortunately, that is having repercussions in the Highway Trust Fund because people are not buying as much gas and paying as much tax.

But anyway, I appreciate the discussion, and your work. Thank you very much.

Mr. Chairman, I yield back.

Mr. Whitfield. Thank you very much. The gentleman yields back, and that concludes today's hearing.

Mr. Rush. Mr. Chairman, I have a unanimous consent request.

Mr. Whitfield. Okay. What is it?

Mr. Rush. Mr. Chairman, I would ask that the record reflect that Commissioner Clark's two sons have been the most attentive and intense listeners we have had before this committee in years and years and years.

Mr. Whitfield. Without objection, so ordered.

Mr. Clark. Mr. Chairman, and ranking member, I appreciate the compliment, but you realize when you make it it is going to cost me a lot more money somewhere down the line paying them back. So thank you.

Mr. Whitfield. Well, I am sure that their classmates are going to be excited for them to tell about this hearing that we had on FERC and the clean plan, and they will be the most popular students in school.

And I am also going to ask unanimous consent that we enter into the record a statement from the American Public Power Association on

this hearing.

[The information follows:]

******** COMMITTEE INSERT ********

Mr. Whitfield. And that will conclude the hearing.

I want to thank all of you for being here. We also thank you for your responsibility in what you do for our country. We look forward to working with you because we don't really have any easy answers here. There are many challenges facing all of us, and I know that even though we have philosophical differences, we do have the same goal and that is to have a strong economy and reliable abundant electricity.

So thank you all again. The record will remain open for 10 days.

And for the Clark children, I hope you will come back and see us again soon. Thank you very much.

[Whereupon, at 12:16 p.m., the subcommittee was adjourned.]