BEFORE THE
ILLINOIS COMMERCE COMMISSION
BENCH SESSION
111(d) POLICY SESSION 3
Thursday, November 6, 2014
Chicago, Illinois

Met, pursuant to notice, at 2 P.M.,
at 160 North La Salle Street, Chicago, Illinois.

PRESENT:
DOUGLAS P. SCOTT, Chairman
JOHN T. COLGAN, Commissioner
ANN McCabe, Commissioner
SHERINA E. MAYE, Commissioner
MIGUEL DEL VALLE, Commissioner

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CHAIRMAN SCOTT: Good afternoon, everyone. I assume you can hear us down in Springfield.

A VOICE: We can. We are all set.

CHAIRMAN SCOTT: Very good. Thank you.

Welcome to the third of our three scheduled policy sessions of the clean power plan the USEPA's regulation under Section 111(d) of the Clean Air Act producing greenhouse gas emissions from the power sector.

With me here in Chicago are Commissioners Colgan, McCabe, del Valle, and Maye. I am Chairman Scott. I want to thank our sister agencies, the IEPA, DCEO, and IPA for helping us to put these programs together and to work with us under IEPA's lead in responding to the USEPA's proposal.

As you recall, on June 2nd of this year the USEPA issued the clean power plan calling for reductions in greenhouse gases from the power sector based on a set of building blocks which produce different reductions on a state-by-state
basis using 2012 as a baseline year and seeking a reduction in targets by 2020 and 2030.

Comments to the EPA are now due on the proposal in December, and the final rule is expected to be announced in June of next year. Under the current proposed time line, states have to submit compliance by the end of June 2016, although there are provisions for some delays, including the states participating in a multi-state compliance program.

The EPA has very recently also issued a Notice on Data Availability, or a NODA -- the acronyms are great. You have got to love them -- concerning the clean power plan with the purpose being to let folks know some of the areas where they are receiving many questions and comments and to ask everyone for additional comments on certain issues. Those comments are also due in early December.

So states and other stakeholders have been working on a number of these issues with respect to the plan, first, ComEd and the EPA individually or in groups, second, unpacking the rules and see where there are questions or what's in
the rule that may not make sense in a particular state, and also looking at regional multi-state approaches.

We've been doing all of those things in Illinois, preparing comments, working with other groups on comments, and analyzing the rule for our own compliance pathway, as well as working with other states to see if multi-state approaches work or may work for Illinois.

Obviously, all of this is important to us here at the ICC, as decisions are made here and in other states will affect the liability and the cost of electric service to our citizens and our Commission which is why we have convened these sessions.

In the first session we looked at the proposed rule itself, what's trying to be achieved and overall what it looks to require from us here in Illinois. We then looked specifically at building blocks one and two focusing on generator plant efficiencies and natural gas ramp up.

The second session we focused on
building blocks three and four of the clean energy sources, which is renewable nuclear power and energy efficiency, and what the rule means for us in those areas, and how well we are positioned to respond.

In both sessions, as is true of today, we have been joined by experts in the field, local and national, to help us sort through a very complicated, a very important proposed rule.

We have approached this from the standpoint, just to get this out of the way, that the rule will be implemented. We are well aware of the legal challenges, which have already started to the rule, but we have to assume that it's going to happen in order to do what we need to do in terms of preparing for a compliance pathway.

It's important to remember in that regard also that the impetus to this rule began with the U.S. Supreme Court's decision which indicated that USEPA could, and, in fact, should regulate carbon under the Clean Air Act.

So there's a lot of speculation because of the election this week, and what's going
to happen in the U.S. Senate, and whether or not the 
president can veto certain laws, and then there's 
going to be court actions, you are well aware of all 
of that, and so just to let you know that we are 
proceeding with this, because at some point, if it's 
necessary for us to actually put some compliance 
pathways forward, we want to be able to go to work 
to do that.

So today, as we had planned when we 
laid out this schedule for the policy sessions, we 
are going to pivot with one exception -- I'll 
explain in a minute -- discussions of compliance 
pathways, what Illinois can do, what's important for 
us to keep in mind as we progress, and what the 
options are for multi-state compliance.

The one exception to that is that we 
also want to ask our national experts about the 
recent issued Notice of Data Availability and what, 
if anything, we can learn from the fact that the 
USEPA is asking us to comment on a number of 
specific areas, and are there other bits of 
information and guidance we expect from The USEPA
before the December comment period or before the
June 2015 final rule.

So to help us accomplish all of this
over the next two hours and 50 minutes or so, we
have a number of folks to talk with us, and we
sincerely appreciate everyone being here.

We are going to start with a group of
members from the Illinois General Assembly, not
specific on questions. There's no quiz for the
members on 111(d) so much as to give us a sense as
we are developing energy policy into the realm of
111(d) compliance, what are the important
considerations that they want us to keep in mind as
we do that, and we really appreciate them being
here.

We know this is a very busy week.

Having been a member of the General Assembly, as
Commissioner del Valle and I, we know how busy these
weeks are whether they're in a hotly contested race
or not. We know this is a really busy time, so we
appreciate your being here.

We are also going to hear from a
representative from the Attorney General's office to
tell us, as with the legislators, what is important
to them as we pursue energy policy, and then we'll
be joined by two gentlemen who have now been working
in the Clean Air Act for a number of years but who
have also been working recently and currently with a
number of states on a clean power compliance plan,
and including multi-state options, as we will go
through a range of options with them that our state
and others raise, too.

And, finally, we will speak with
representatives of the two grid operators that
provide service to Illinois residents, MISO and PJM.
All of the plans that us and all of the other states
are working on need to fit somehow into the system
of how power gets dispatched, and that's obviously a
huge impact on liability and cost, and so we need to
talk with the regional transmission organizations
about that.

When we are done for today, I'm pretty
sure that we will be to answer everyone's questions,
and at least we hope there's an understanding of the
kind of issues that we are facing as we try to
develop an energy policy going forward.

With that, I'll ask the other
Commissioners if they have anything they would like
to say before we start.

(No response.)

Okay. Then with that, we don't have a
seniority list, so there's no particular order, if
the legislators would come up to the table here and
sit around the semi-horseshoe there. You are all
welcome to come up. Representative Davis, don't be
shy.

REPRESENTATIVE NEKRITZ: He's the most senior.

CHAIRMAN SCOTT: We have Representative Phelps in
Springfield with us.

So I think what we will do is maybe we
will take a couple of the folks who are here in no
particular order, and I'll just call them as you sit
down, and then we'll go to Representative Phelps,
and then come back, and, again, just to go around
once, but basically just a few minutes on some of
the things that are important to you as we start to
sort through all of the issues relating to the clean
energy plan and some of the other energy challenges
that we are facing in Illinois and talk about what's
important to you.

And we will start with Representative
Davis as most senior.

PRESENTATION

BY

REPRESENTATIVE DAVIS:

Thank you very much, Chairman Scott,
Commissioners. Thank you very much for the
opportunity to be here. Unlike my colleagues, I'm
looking at notepads and iPADs, and things of that
nature. I don't have any Cliff's Notes, but the
reason I'm here is not altogether different than
previous reasons that I have come before the
Commission as well.

As we look down the road at these
compliance issues, when we are working to be
compliant, that means we are going to spend some
money. I'm not sure how much money is going to be
spent to get Illinois to where it needs to be, but
dollars will be spent.

So I come to you today to encourage, as Chairman Scott indicated, about looking at things or pieces of things as we walk down this path along the issue of diversity, supplier diversity, employment diversity. However you want to categorize it, companies are going to be spending money to upgrade their facilities, to reform their facilities, for lack of a better way of putting it, dollars will be spent. At the state level, those dollars will be pushed out the door to help in doing things like this, and I think it's just important that the conversation about diversity happen on the very front end of this conversation versus somewhere down the road.

I think we have seen in past instances and in other conversations when we talk about diversity somewhere along the way it gets lost in the conversation. Companies will argue that, well, you know we can't find, it's not available, folks aren't trained, you know, all of the things that we have heard. So, guess what. Why don't we talk
about it now.

To the extent in which you as Commissioners and us as members of the General Assembly, we have the ability to -- for lack of a better word -- legislate, things of that nature, at least put parameters in place that speak to the idea that we must have diversity, again, in our contractors and the work force.

To the extent in which we can, I think we need to be talking about how we do that and to the extent in which it can become more than just conversation. Again, as we talk about the possibility of legislating it, we should be I think trying to do so.

It is my understanding that, you know, these kinds of efforts over a period of time we could be spending upwards of half a billion dollars to try to make all of this stuff happen and coming in compliance with what the federal government is asking us to do. That's a lot of money and a lot of folks will be put to work and a lot of contractors will be hired to make that happen.
So, again, as we look down the road, I would just implore the Commissioners to try to put in place whatever parameters we can that are appropriate -- and I want to be clear about that -- that are appropriate whatever parameters we can to make sure that diversity becomes an integral part of the conversation at all phases, that it's appropriate to become an integral part of the conversation as we move forward. Thank you very much.

CHAIRMAN SCOTT: I appreciate that. Thank you, Representative Davis. I said we wouldn't ask any questions, but, just in case, is there clarifying questions from anybody of Representative Davis?

(No response.)

Okay. Very good. I will note also that you segregated yourself. The House members sat here and the Senate on this side.

(laughter.)

Let me say hello to the Senate.

Senator Koehler, thank very much for being with us today. I know you have done a lot of work working
on the Blue/Green Coalition as well, so I appreciate your being here.

SENATOR KOEHLER: Thank you

PRESENTATION

BY

SENATOR KOEHLER:

Thank you. Thank you very much, Members of the Commission. Is it on? How's that? Thank you very much, Chairman Scott and Members of the Commission. I'm going to give you just some observations and a little bit of background of some work that I'm doing right now.

Just by way of background, I'm currently the vice chair of the Senate Energy Committee, and I've also been nominated by President Cullerton to be involved in an organization called, "The Legislative Energy Horizon Institute," and that's sponsored in part by the National Conference of State Legislators, University of Iowa, Department of Energy, the Pacific Northwest Laboratory.
As it happens to be, tomorrow I'm leaving for Washington D.C., for the second part of that. We had our first group of meetings in Washington State and Richmond, Washington, at the Pacific Northwest National Laboratory, which is owned by the Department of Energy. It's really their think tank for cutting-edge energy, you know, ideas and resources. It's been fascinating. I think I know enough now to be dangerous, which is probably the extent of it, but certainly I'm interested in it.

Also, this past summer I put together a group in Peoria, much like the Blue/Green Coalition of environmentalists and laborers, Jack Deering from the Sierra Club and some of the environmentalists locally, Jonathan Michaels in Springfield and Representative Phelps, how are you folks.

Jonathan Michaels has been a resource to us. We have got the local leaders and we are trying to address the issue of how do we create a common agenda, and I'll just speak as a democratic
legislator.

The toughest time I had was getting caught between two important constituents like environmentalists and labor, and so out of self preservation, if nothing else, I called this group together to say can't we talk about what things, you know, we can agree on, so we were trying to create a common agenda, jobs being number one.

I certainly want to echo what Representative Davis has said about making sure that we are diverse and the jobs that we see provided in terms of whatever we do in energy, but there's some questions that we have been kind of kicking around and from some of the things that I have learned with this Legislative Energy Horizon Institute, they are particularly related to Illinois.

When I talk with my colleagues, and it's about 40 of us from Canada and the United States, first of all, Illinois is unique in that we are deregulated. There are not many states, especially in the Western part of this country, that are deregulated, Texas, and the Midwest, I guess.
Also, we have eleven nuclear power plants. That's just kind of unheard of.

Let me tell you one of the concerns that came out of this environmental labor working group expressed by the representative from the steamfitters. He said, I was called to Missouri to a conference with Ameren to talk about their maintenance plans for the next five to ten years and they had it all laid out. This is what we are going to do. This is how many workers we are going to need. This is how much we are going to capitalize the maintenance and the upgrading of our facilities.

He said we don't do anything like that in Illinois, and that's one of the questions that I have is how do we capitalize our generation upgrades or, if we need to build new generation units, how do we capitalize that in a deregulated market?

We tried to put a mask on that, and that was a terrible failure, but I think we have got to pinpoint that as one of the priority needs of Illinois, because I used to do a lot of work in neighborhoods. I live in a poor neighborhood in
Peoria. I don't want the slum-landlord affect to take place. I don't want power plants to be purchased and then bled dry to be scrapped.

We need investments, and I'm proud of the fact that Illinois has really led the way in terms of wind production, and we do have a couple of solar projects that I'm working on with a group out of Fulton County which are very exciting. In fact, Farmington High School just put up a solar panel which is going to cut their energy cost by a third.

So we have got some exciting things going on, but still base-line, base-load plants are always going to be needed, because that capacity has to be there for the needs of our citizens.

So how do we do that in a deregulated environment? I don't know. The thing that I'm trying to focus a little bit more on 111(d) requirements. I think there's some real opportunities in that, but I think we have to be very smart in terms of how we do that.

There is a friend who I will see next week. He's a senator from Minnesota, and we got to
talking off the side, and he said, you know, what if we were to look at some kind of a multi-state partnership and we could, you know, partner with Illinois, and we started thinking about that. We talked to somebody from another state and they said that might have some advantage to us.

I look at the fact that we have eleven nuclear power plants and we have to somehow take advantage of that. We already have part of the solution right here in our state.

I think that we are going to hear more about that later on in the agenda. If we can have the polluters helping to pave the way for the new cutting-edge production of electricity generation, then that's great. I don't think government can fund it all.

I think that Illinois has got a lot of issues that we have to address, not to say that we are I think the only state that I know of, but maybe there's a few on the East Coast that have two RTOs with very different philosophies in terms of how they operate.
I'm not smart enough to tell you, you know, what I think works and what doesn't work, but why? Is that really to our advantage? So I think we have got to take into account the whole gambit of protecting the environment, of creating jobs, of making sure that we have, you know, the incentive for capitalization of, you know, maintaining our generation plants.

I think we need to look at really the ratepayers. The ratepayers have to be protected in all this, and this Commission does an excellent job in articulating that, so we have got some exciting times ahead of us, but I think we have also got some real issues that have to be addressed.

I'm glad to be here with my colleagues from the legislature. I think that we need to actually form maybe an energy caucus to continue to work on these issues, because if you probably mentioned -- and I'm just guessing -- if you mentioned what is an RTOs to most of our colleagues, they would probably have no clue, no clue, but those are so important issues in terms of how we as a
state function in terms of our energy capacity.

REPRESENTATIVE DAVIS: So you are going to tell us what it is?

(Laughter.)

SENATOR KOEHLER: Regional Transmission Organization, and we have two of them. We have PJM and we have MISO.

CHAIRMAN SCOTT: We'll have both on the agenda later.

SENATOR KOEHLER: But anyway, I thank you for your time in allowing me to be here.

CHAIRMAN SCOTT: Thank you very much.

Yes, Commissioner Colgan.

COMMISSIONER COLGAN: This is not a question, just a comment. Senator, you said that you think you know enough to be dangerous. I think you know enough to be asking the right questions, because you asked a bunch of right-on-the money questions, and there's a lot of work that can be done with this Commission with the General Assembly to try and resolve some of those issues.

SENATOR KOEHLER: Thank you.
COMMISSIONER del VALLE: Just quickly, I want to echo the Commissioner's comments, and I want to thank all of you for being here. There are just not enough representatives and senators in the General Assembly that are knowledgeable in this area, and, yet, to hear you speak and have all of you here today is reassuring.

And I want to ask you are you going to chair the Senate Energy Commission next year?

SENATOR KOEHLER: I'm interested in that. We'll see what happens.

CHAIRMAN SCOTT: Kind of late breaking news there.

Let's go to Representative Phelps. I appreciate you joining us from Springfield.

PRESENTATION

BY

REPRESENTATIVE PHELPS:

Thank you, Chairman. My name is State Representative Brandon Phelps from the 118th District, or, as you know and the senators know that we call that God's country down in Southern
Illinois. I'm at the bottom of eleven counties, and a lot of my colleagues that are with me today can't believe I have eleven counties because they only represent eleven streets, and that's how rural my area is.

First of all, I want to thank the ICC and Jonathan Feipel for the opportunity to testify today. Also, I want to thank Commissioner Scott, and IEPA, and the ICC staff for their efforts in trying to develop policy options for the EPA to consider as it starts development of a state plan for compliance.

As you know, and my colleagues would say, the General Assembly is very interested in this and not only the coal aspect but other forms of energy.

I live in coal country, but I was one of the main sponsors of the solar bill that we had this year, so I think that we need all the aspects of energy in our state. As you know, I got criticized a few times. It is important for my area, and it passed with sponsored House Resolution
782, and that was one of two resolutions that was passed.

If you are not familiar with House Resolution 782, it more or less recognizes that coal is an integral part of our state. Over 42 percent of our energy comes from coal and it's a key part to our economy with the jobs that it has.

A coal-fired generation, as you know, is a 24/7 job, 364 days a week. Recognizing that electric generation companies have invested billions and billions of dollars of investment in environmental upgrades and, as you know, it calls on the USEPA to give what we think is very important. Let Illinois have its flexibility when it comes to Illinois policy and not just a cookie-cutter approach, because coal means so much to Illinois.

The other resolution I will get into is House Resolution 1146 that passed the House that I also did support to make similar points regarding the benefits of nuclear power and to the state economy, the reliability and affordability of electricity, and it points out that nuclear power
out of state can maximize fossil fuel and to promote statewide carbon emissions overall.

The bottom line is taking together both resolutions, we recognize the importance of base-load coal and nuclear generation to the economy of Illinois, and we need to make sure that any state compliance plan that does everything possible to protect Illinois jobs, the economy, the affordability and reliability of electricity.

I also want to make this point. I sincerely think a lot of Representative Davis, and Representative Koehler, and Chairman of the Public Utility Commission Telecom in the House, and that I will do everything I can to work with him to make sure that we hit goals, and I think that's very important.

Also, Illinois needs to have, as I said earlier, all of the above energy strategies, that includes coal, nuclear, and natural gas, renewables, and energy efficiency, and one that's market-based fuel neutral. That's what I'm looking for and what I believe many of the members of the
General Assembly are looking for.

On a personal level, I told you, Chairman Scott, I'm from Southern Illinois and have coal-fired power plants in my district with one job in Illinois, in good old Manipeg (sic) County.

Dynergy, which operates this very demand, is a major employer and taxpayer in my district; similarly, over two-thirds of the 22 coal-fired generators impacted by this rule are located in Central and Southern Illinois south of 1-80, and the economic engine for many, many in downstate Illinois, and Senator Koehler can tell you that. For example, statewide coal-fired generation jobs has over 2400 high-paying jobs.

For example, Dynergy, the largest coal and natural gas generation company in Illinois with 8300 megawatts, over 9,000 engineering jobs, over 655 million in household earnings, over 39 million in state tax revenues, over 23 million in local property taxes, economic activity over 2.4 billion -- with a B — 2 billion spent on environment upgrades in recent years as well.
We need to make sure that we do everything we can to support these and other similar investments in Illinois, the jobs, the economic impact, and make sure that we have policies that give these plants the opportunity to succeed and also give them flexibility to survive the transition as we implement the rule.

Anything less, Chairman Scott and Mr. Feipel, I think will likely be difficult for the General Assembly and the public to accept.

Any questions, I would be glad to answer.

CHAIRMAN SCOTT: I appreciate that Representative Phelps. Any questions?

(No response.)

Thank you very much for being with us.

We appreciate it.

REPRESENTATIVE PHELPS: Thanks for everything.

CHAIRMAN SCOTT: Let's go to Senator Biss.

PRESENTATION

BY

SENATOR BISS:
Thank you very much. Is this on?

CHAIRMAN SCOTT: Yes, you are on.

SENATOR BISS: Thanks very much for having us and thank you for holding these hearings. I want to keep my comments extremely short and extemporaneous. I would say as we think about the implementation of this rule, I keep coming back to two basic principles, the most important of which is to keep -- to bear in mind the kind of long-term goal of the process as opposed to simply the letter of the rule itself, and so it appears to be the case that will be granted a fair amount of flexibility of what different options we can take, but I think we have a clear sense of where as a society and state we expect to be in future generations, and it seems to me important to use the implementation of this vehicle to use in that direction as rapidly as possible, but I keep coming back to thinking about how to emphasize both efficiency and renewables in the implementation of a mix that we put together.

With that said, I would want to highlight what I would characterize as kind of a
similar spirit two things that Senator Koehler mentioned. The first is this possibility for interstate collaboration, which I think is worth highlighting for two reasons, the first of which is that the State of Illinois has some unique advantages which could very well position us in certain types of regional arrangements, but the other is -- you know, let's be realistic. This action by EPA, it is what it is based on the political realities of Washington as they are. It doesn't mean that the ideal solution is to kind of fragment the country into states and imagine that borders between the states are impermeable to electrons, So I think we are both leveraging our own assets, but also making good policy we are able to enter into a legislative agreement.

And then the last thing I would say on this topic of the Blue/Green Coalition, particularly as we think about the long-term energy transformation that our nation is going to have to undergo, let's not get tricked into feeling that the transformation and energy assets has to be paired
with downward pressure on wages.

The fact that there seems to be some
downward pressure on wages in the broader economy is
important, and terrifying, and scary, and sad, but
that doesn't mean that we have to accept that new
sectors have to be organized differently and have to
be held to lower labor standards, lower wage
standards than on old sectors.

As we embrace the transition, I don't
think we ought to be embracing downward pressure on
wages. We ought to be managing the transition so as
to counteract that social trend, and I think that
principle is at the core of protecting and
respecting the Blue/green Coalition that Senator
Koehler wants so much to build.

So with that, I thank you for the
chance to be here and look forward to seeing and
learning from you and working on this issue.

CHAIRMAN SCOTT: Thank you very much, Senator. I
appreciate it.

Elaine Nekritz, you want to go?

REPRESENTATIVE NEKRITZ: No.
CHAIRMAN SCOTT: She keeps deferring.

PRESENTATION

BY

REPRESENTATIVE GABEL:

Thank you. Thank you very much,

Mr. Chairman and Commissioners. I am really pleased
to be here today with you. I have heard about, or
read about, or come to most of the meetings that you
have had on this issue, and I think it's been very
informative, and I really appreciate you doing these
sessions.

I think that it's been clear from
these sessions that Illinois is really poised to
really address our compliance for 111(d) now, that
we are really -- I would say there's no reason to
wait, you know, as people have been talking about it
a number of years.

I think that one lesson is that we
should really think about how we can do this
quickly, and I also want to summarize a couple of
things that my colleagues have said already.

So what I have heard them say is that we have two big opportunities this spring session. The first one is this opportunity to really discuss clean energy jobs for Illinois.

Many of the speakers who came to the sessions before this have spoken about the opportunity for job growth in the renewable energy and energy efficiency arenas, and I heard that someone had said that there were a hundred thousand jobs in clean energy now and that it is truly ripe for growth.

My sense, after meeting with many people over the summer on energy issues, is that we are clearly on the cusp of a revolution in the whole energy arena at all levels of our work.

The second big opportunity that we have spoken about and that I have observed is that Illinois needs to be at the center of a regional approach to carbon emissions.

I'm looking forward to our discussions today about a regional solution, in particular the
cap-and-invest market approach. Illinois strength, as Senator Biss talked about, is that we are one of the most populace states. We are at the center of the country. We have a trained workforce and we also have a manufacturing sector here that's very strong.

I think it's really important that Illinois be at the center of this regional approach, that we have the opportunity to be a leader, but that we have to move quickly in order to be able to assume that role.

People are much more likely to join a regional approach that's already started rather than spending a whole lot of time having meeting after meeting with people, which I know you have spent so much time doing, Chairman Scott, and I really appreciate all the work that you have done on that. I think at a certain point we need to just take lead, move on and work with Minnesota and just begin the process of a regional approach and in time other partners will join us.

I strongly urge participants today to
discuss how Illinois could establish a

cap-investment market approach by 2016 and have

other states join us afterwards.

I also think the other thing that I

would like participants today to discuss would be

how a cap-and-invest market can create jobs in all

parts of the state.

Representative Phelps, and for all

people, labor unions in particular, as you

mentioned, minority groups, Chicagoland, downstate,

urban areas, rural areas, we need to be building in

fields and rooftops everywhere in Illinois.

For us, this is truly a significant

opportunity, and I think we need to take advantage

of it. You know, I always said we need to look to

see where the window's open and then make sure we

jump through it, and I think to me this is an open

window and we need to take the jump, so thank you

very much.

CHAIRMAN SCOTT: Thank you, Representative.

COMMISSIONER MAYE: May I ask a question?

CHAIRMAN SCOTT: Sure.
COMMISSIONER MAYE: Thanks so much for all of you being here first of all. I just want to ask you a quick question, and I know you talked about a regional approach and why you said you wanted Illinois to really take the lead and be the center of approach.

I was curious to know why or if you are opposed to an individual approach for the State of Illinois, and, if so, why.

REPRESENTATIVE GABEL: I think that with the regional approach Illinois has the opportunity to really build more renewable energy, wind in particular, but also solar, and I think that there are some other states around us who are more invested in coal than we are, and I think if we do that kind of a cap and invest, then they can buy our renewable energy, cleaner energy, and we would be the winner of that kind of arrangement.

COMMISSIONER MAYE: Thank you.

REPRESENTATIVE GABEL: You are welcome.

CHAIRMAN SCOTT: Representative, thank you.

I turn to Sue Rezin who represents
seven counties. I thank you, Sue.

PRESENTATION

BY

SENATOR REZIN:

Thank you. It's a downstate district as well, so it's a very large district, and thank you for the opportunity actually for me to be here and learn. I appreciate everything that you do do, and I also appreciate every year we have an energy tour in my district and many of you have come on the tour just to learn more about what is going on in that area. I do appreciate it.

And but just to, you know, kind of give you an overview, again, for those of you that don't know, I'm in the 38th District. In my district I call it, you know, probably the largest energy-producing district in the Midwest, if not in the country.

So of the eleven nuclear power plants, three are in my district. We also have wind, solar.
I have coal plants. I have the peaker plants as well, and we have -- because of that, we also have the grid system coming through, and we also have, you know, a grid system that's trying to come through from the west of us to tie into the grid system, so we see a lot of what's going on in energy right in the 38th District, So we do have challenges.

I am the minority spokesman on energy, so I've often said we get legislation that, you know, sounds good but, you know, where do we plug it in in the bigger picture? Where does it fit in the plan? So that's why I appreciate the opportunity to be here today and listen to all of your speakers as well.

Just a couple of things in terms of jobs, and I do appreciate having, you know, these energy providers in my district meet in terms of jobs. There are high-paying jobs. I mean, there is skilled labor that comes in. They do the turnaround for all of the plants in the district, and there are very, very good wages, make no, you
know, bones about it. This is what's driving the economy in my district, and they're good jobs, so we do appreciate that as well.

You know, and as we try to figure out what the best policy for the state is in terms of, you know, clean energy, you know, we always -- especially my colleagues who hopefully I will be serving on the energy committee -- we have this balancing act of, you know, clean energy and cost, and what does that mean to businesses and corporations in the State of Illinois?

We've heard a lot about the challenges for companies to be in the State of Illinois, but one thing they will tell you is one of our advantages in this state is the low cost of power, and that is a very big line item in their budget, and I would like to just give you a brief example of what businesses do when the cost of power goes up and the decisions that they make.

We have -- part of my district has bought into a clean coal plant, and, as a result of it, they're not flexible in terms of the rates that
they pay. They're locked in, and currently with the low cost of power that's out there, they're not able to go on the market and get this low cost. They're paying a lot more currently.

Now mind you this fluctuates, but that currently you do have businesses looking at that. They're higher energy users and it is a huge part of their bottom line. So when they're making decisions of whether to stay there or not, they're looking at the cost of power and should they stay there and invest or move in this case to the next town over which they have the ability to go on the market and shop for a better price.

So, I mean, just to let you know, these are the challenges that we are going to face. As we are talking about this, I think you know in theory we are all on board with the direction where you are going, but we also have to be cognizant of what that line is in terms of cost and not price ourselves out of the market, because it's a huge advantage for companies to be in this state who are big and large energy producers, so thank you.
CHAIRMAN SCOTT: It's a good point. And you made reference to the municipalities and cost option that are buying power different than what we normally think of, just utilities that go through the alternate suppliers and there's a whole group out there we have to be cognizant of, so I appreciate that and appreciate your very good job.

COMMISSIONER McCabe: Thank you for coming.

COMMISSIONER del Valle: You mentioned you have a clean coal plant in your district. What is that?

Senator Rezin: It's not in my district, but there are municipalities that bought into an association's portfolio.

CHAIRMAN SCOTT: And just so you know, when I was representing Rockford and was downstate, we were all geographically challenged.

Senator Rezin: I appreciate that.

CHAIRMAN SCOTT: Representative Nekritz, thank you for being here.

PRESENTATION

BY

REPRESENTATIVE NEKRITZ:
Thank you, Mr. Chairman. I think I missed one of the meetings, but I think this is really an important process that you are going through. This is such a complex area and so that to dedicate the time and thoughtful dedication that you are giving to it is welcomed and very worthwhile.

The disadvantage to going after however many is that all of my points have been made. I thought I was going to get away. I thought Sue Rezin, when she started talking about the low cost of energy in Illinois, that was my last one.

I do think that as I served on the Illinois Jobs Task Force a few years ago, one of the things we consistently heard from employers and companies located in Illinois and wanting to locate here was the cost of power was one of the significant advantages we had. I think that that has to be a consideration that we look at for bringing non-energy-related jobs to Illinois, but the energy-related jobs are also critically important.

As Representative Gabel mentioned, we
have over a hundred thousand folks working in that sector now, and that is something that we really can grow and expand on.

Two of the priorities I think for legislation this spring are going to be the fix for and expansion of renewable portfolio standards as well as expansion of the energy efficiency standards, and those I think are going to be critical component parts of whatever we do on the 111(d) Rule as well, So I think we can hopefully be working together on the same goal with regard to those items.

I do believe that a broad energy mix is critically important to keeping our energy prices low and maintaining the jobs that we have, and those are the things -- those are the goals I think that we need to focus on as we go through this discussion.

So, again, it is an important debate. I'm glad to see so many members of the General Assembly here, because I think it speaks to the importance of the issue.
CHAIRMAN SCOTT: Well, thank you very much.

Any questions for Representative Nekritz or any of the other legislators?

(No response.)

Any of the legislators, do you have other points you would like to make?

COMMISSIONER KOEHLER: Just one comment I want to clarify when I talked about Illinois being deregulated among regulated states around us, I'm not advocating that we go back and try to re-regulate, but I am saying we have to figure out a way that we can incentivize investment into our generation plants.

I do want to mention one exciting project that I saw in Canada, and I heard about in Washington State as well, and that's conversion of coal plants into biomass plants, and I think if we look at how the synergy would be created between agriculture and power generation, that might be very exciting for us in Illinois to look at that, because we have seen that there's been a lot of natural gas conversion, and natural gas is very cheap right now,
but I think we need to think beyond and really look
at how we can take full advantage of the resources
that we have in Illinois.

I am very happy to see all my
colleagues here, because I think we have got a big
issue and an exciting start to this, and I do
appreciate the work that this Commission has done.
I listened to the last meeting on the internet.
It's much better being here in person.

(Laughter.)

CHAIRMAN SCOTT: Most people say the opposite.

(Laughter.)

Commissioner Colgan.

COMMISSIONER COLGAN: A comment about that issue
that you are talking about. In a perfectly
integrated state, those states do what they call
"integrated resource planning," and because they can
actually order a utility to build generation, if
needed, that is where in a competitive state -- and
you are shaking your head. You probably know
this -- but in a competitive state we actually were
not allowed as a Commission to do integrated
resource planning, and there needs to be some sort
of way of coming together so that we can actually
have a view of where we stand, because right now if
we went to the competitive marketplace and, you
know, we are not going back in the other direction,
but we are entirely dependent upon the marketplace,
and there are a lot of challenges in that
marketplace with retirement of coal plants and all
kinds of things happening in there partly why we are
doing these sessions, but the Commission doesn't
have any authority here to do any sort of integrated
resource planning, and I don't know how you package
that, because it's a complex issue, but I think
there could be someway to go about that.

SENATOR KOEHLER: Can I respond to that?

CHAIRMAN SCOTT: Sure.

SENATOR KOEHLER: I think that's an excellent
point. I think one of the things we have to look at
is maybe the whole area of public/private
partnerships. We have seen that done with the
highway system. We are going to have a subject
matter hearing on transportation and agriculture on
our lock-and-dam system looking at a public/private partnership approach.

So I agree. I think we have to really roll up our sleeves and solve that problem, because what I don't want to do is wake up ten years from now and see all of our coal-fired plants shut down, but what we are doing is we are now buying coal and electricity from Indiana, and Kentucky, and Missouri, and Iowa, and everywhere around us, because that's what could happen is that we could outsource all of our electric production which means our jobs go out of state.

CHAIRMAN SCOTT: Anybody else like to respond to anything that they have heard?

Representative Phelps, anything?

REPRESENTATIVE PHELPS: (Shaking head.)

CHAIRMAN SCOTT: Okay. Thank you very much.

Again, I really appreciate your being here and as the debate goes on we will be talking a lot. So thank you very much.

Commissioner Colgan.

COMMISSIONER COLGAN: I do have one thing maybe I
can throw in here, sort of time limited, but I want
to make this point. If there are structural deficit
issues with the budget of the Illinois Commerce
Commission, and I know the staff has been working on
that, being really focused on that and have some
really good and creative alternatives to how we can
resolve those issues, and I thought it would be a
good time to just kind of remind people that that's
on the table.

(Laughter.)

CHAIRMAN SCOTT: And, in addition to that, I
think the other point is that you are also hearing
discussions about the kind of utility of the future
and some other topics that we are going to take up
in a fairly major way, and all that plays in
together.

As we start talking about what our
generation mix is now and what it's going to be, we
have to be cognizant of the fact that in a lot of
places you are seeing a lot of people that are
generating their own power. Now we see that some in
Illinois, but it's in greater degree in other
places, so we have to look at that issue as well, but it all ties into the same issues that we are talking about here.

So there's a larger debate I think that we are all going to have to have, and while this isn't one focused on lll, that's why I want to at least expand and talk about the energy policy in general, so there's plenty that we all have to work on here going forward, So thank up very much.

Appreciate it.

Turning next to Cara Hendrickson, Cara is with the Chief Public Interest Division and the Office of the Illinois Attorney General, Lisa Madigan, and I appreciate you coming, and it looks like the legislators will hear your thoughts on some things you would like to see the General Assembly focus on as we move forward. Thank you much for appearing.

PRESENTATION BY

MS. HENDRICKSON:

Thank you, Chairman Scott and
Commissioners. On behalf of the Attorney General, Lisa Madigan, thank you for the opportunity to speak with you today on this important topic. We would like to express our appreciation to the ICC, as well as to the Illinois EPA, to the IPA, and DCEO for convening these conversations in helping to advance the dialogue about our planet and energy in the future.

I would like to especially acknowledge the contributions of the Members of the General Assembly who participated in today's session, and many of my colleagues will be echoing again some of the same things that we heard from them this afternoon.

It's encouraging to see the diversity of stakeholders who participated in a wide range of issues and options that were brought to the forefront of these sessions, so, again, thank you. The federal carbon standards and the opportunities for the creation of a state implementation plan is an important issue for the Attorney General's office. Addressing climate
change is a long-standing environmental priority of
the attorney general.

Chairman Scott, as you mentioned, in
2003 our office joined with several other state
attorneys general to support the authority of the
federal government to regulate greenhouse gas
emissions under the Clean Air Act.

We were successful in the U.S. Supreme
Court case of Massachusetts vs. The EPA whereas you
mentioned the court held that greenhouse gases are,
indeed, pollutants under the Act. That historic
decision set in motion a series of actions that the
USEPA is taking to incorporate greenhouse gas
emissions into our regulatory system.

Today USEPA is in the process of
developing and implementing Section 111(d) carbon
pollution standards for peak power plants. That's
an important step forward as power plants represent
the largest source of greenhouse gas emissions from
stationary sources in the United States.

After more than a decade of advocacy
and litigation at the federal level, we are pleased
to see the results of important and meaningful processes in Illinois and in other states around the country.

As we continue to represent the State of Illinois in the legal arena, we are equally committed to playing a formative role in our state planning effort to comply with the standards and, in that spirit today, I would like to offer five principles that the Attorney General's office believes that should guide and inform the deliberations as we move forward.

Happily many of these principles overlap some of the same things we have heard this morning and which gives us a real reason to be encouraged about this planning process going forward.

First, and foremost, among those principles is the importance of least-cost planning to meet our energy and carbon reduction goals. Utility bills matter for all users, residential, commercial, and even large industrial users for whom electricity costs can often be one of the largest
expenses at their facilities.

In recent years, as has been mentioned, the average price of electricity in Illinois has been well below the national average and among the lowest in the Midwest.

As we consider approaches to comply with the proposed carbon rules and reduce emissions, it's critical that policymakers in Illinois are able to assure ratepayers of all types that the most cost-effective approaches are being pursued to meet our energy requirements and keep the overall cost of electricity affordable.

In order to accomplish this objective to protect the public's access to affordable energy while reducing carbon emissions, policymakers require the most comprehensive information available to identify exactly what those needs are, both for carbon reductions and for energy production, and then, once that need is identified, to thoroughly assess the costs associated with potential options to craft policies that will benefit consumers and the state as a whole.
Policymakers should have data that answers a few of these questions: What are the carbon reductions that we need to make under both a rate base and a mass-base system? How far will existing policies take us? And what's the gap that must be filled? What is the resource potential and the total cost of each of the full range of supply-side and demand-side resources?

This data should include costs and savings associated with each of Illinois resources, including making our coal plants run more efficiently, using more natural gas, existing nuclear plants, increasing renewable efficiency and demand response, among other options.

Finally, policymakers should have data that shows how each of the different compliance strategies affect energy and capacity prices, supplier revenues and customer bills.

We need all stakeholders to release relevant information, including generation costs, expected changes in demand, and the projected changes in price associated with the various options.
available to comply with the federal carbon standards.

Illinois policymakers cannot be expected to evaluate the contributions or costs of a generation source, whether nuclear, renewable, clean coal or something else without complete information. Least cost planning informed by comprehensive data is the single most important principle that should guide our analysis and insure that we can keep our electricity reliable and electricity bills affordable and competitive.

A second guiding principle is the importance of drawing lessons from proven models. For example, we know that properly designed market-based systems can produce significant benefit at a reduced cost.

The USEPA's Acid Rain Program is a prime example of a well-structured market approach to reducing pollution that has drastically and cost-effectively reduced sulfur dioxide emissions from power plants through the use of market-based trading systems.
Another market-based example is the restructure of our own electricity system, which has allowed the IEPA and other suppliers to save consumers millions of dollars by creating a marketplace for power supply with competitive bidding.

It's also worth bearing in mind, as others have mentioned, that electricity markets are continually changing. Low natural gas prices and other factors have reduced electricity prices for consumers, but we do not know for certain how long natural gas prices will remain at the current level.

Similarly, while capacity payments received by generators have varied over the last several years, we do know that capacity system operators, like PJM, are proposing to make potentially major changes to capacity-charged models. Some of the proposed changes, if enacted, could substantially raise capacity charges.

Properly designed market-based programs are well suited to respond to changing conditions and new dynamics such as these.
Of course, market-based solutions are not the silver bullet for every policy change we face, but Illinois' successful implementation in the Acid Rain Program worked well to both control costs and reduce pollution, and Illinois' competitive electricity market has generated savings for consumers. The use of market mechanisms should be carefully considered as we chart the path ahead.

The flexibility in compliance options offered by the proposed carbon standards allow us to examine a range of possibilities across the electric sector as a whole. No particular compliance method has been preordained, and policymakers should draw upon the proven models to set Illinois on a path for the future.

The third policy principle we would like to offer is that we should examine how to build on past successes. Historically, we have sought to insure that our state energy policies produce positive results for the environment and the economy while at the same time making certain that ratepayers are treated fairly and energy prices
remain affordable.

It's now appropriate to take a step back and consider how we might achieve even further progress and what policy adjustments may be needed to continue reaching and expanding our goals. We've made important progress toward making Illinois more energy efficient, growing Illinois renewable energy resources and capturing market savings for consumers.

As has been mentioned, the American Council for Energy Efficiency Economy points out that energy efficient programs cost about three cents per kilowatt-hour, by far the cheapest options for satisfying our electricity needs.

According to the Clean Jobs Illinois Report, there are nearly a hundred thousand workers in Illinois employed in energy efficiency, renewable energy and associated fields with 62 percent of those workers helping consumers save money by using less electric energy.

On the renewable side, our policies have helped Illinois go from 50 megawatts of
installed wind capacity in 2003 to over 3500 megawatts today. Illinois is poised for similar growth in solar generation as distributed generation and solar carved-out policies are helping to open the markets for smaller size residential systems. Reducing demand and including more clean energy in our system gives us flexibility to reduce reliance on an infrastructure that's getting more expensive as it ages and now must account for associated carbon pollution. It also provides a growth industry, including jobs in engineering and research, installation and maintenance, manufacturing, sales and distribution, and professional services. Identifying how to build on what's working and what barriers to further growth needs to be addressed, while maintaining our sensitivity to ratepayer impasse will help us to reduce carbon emissions and increase economic development in Illinois. The fourth guiding principle is that the key to expanding efficiency renewables and
innovation is insuring that opportunities are available for everyone in Illinois, especially low-to-moderate income households, to participate in efforts to reduce energy use or generate power locally. This is a question of both scale and equity.

To reach greater levels of carbon reductions, we must work towards the goal that every residential and business owner in our state has the opportunity to reduce their energy use through long-term energy efficiency measures and through sharing in the benefits of new products and technology.

Low-to-moderate income households spend a higher proportion of their income for basic necessities, like lighting, heating and cooling. By prioritizing the involvement of these households in efficiency distributed generation and product innovations, we can both expand our carbon reduction efforts and deliver the benefits of reduced costs to those who need them most.

Finally, the fifth guiding principle
that we would like to offer today is that when
evaluating potential policy approaches to state
energy policy, we should prioritize those things
that encourage continued growth and innovation.

The climate is changing, but so is
technology. New devices and new applications, such
as energy efficient programmable appliances and
residential solar systems, may offer consumers new
and different ways to participate in the electricity
system.

More data, more communication and more
integration are clear trends across the utility
landscape and are enabling things like distributed
generation and demand response to grow and expand.

We know that the energy sector is
already an important source of innovation, economic
development and jobs in Illinois. As new
technologies and sources of income join our
traditional reliance on coal and nuclear, we must be
cognizant of the challenges facing those communities
where aged power plants are located and of the
economic and technological challenges that will
affect people's livelihood and communities.

Properly directed, the policy approach is to comply with carbon reduction requirements can insure that Illinois is a leader in energy innovation and growth both now and in the future and that no region of the state is left behind. This transition can and must be managed fairly and equitably for all Illinois residents.

And, in conclusion, the Attorney General's office looks forward to participating in the process that thoroughly weighs and investigates all of our options for meeting our carbon reduction goals and potential conforms to Illinois' energy policy principles.

With the right principles in mind, we are confident that we can find a path to cost-effective reductions and carbon emissions that maximizes the benefits and savings for all Illinois consumers and establishes the ground rules for long-term sustainable energy in the future for our state.

Thank you again for the opportunity to
address you this afternoon.

CHAIRMAN SCOTT: Thank you, Ms. Hendrickson.

Any questions? Commissioner Colgan.

COMMISSIONER COLGAN: I'm sorry, but your second principle kind of blended into the third principle. What was the bullet point for the third principle?

MS. HENDRICKSON: The third principle is building on past successes, and that includes taking a look back at what has worked and building on it going forward.

COMMISSIONER COLGAN: The second was draw some lessons from proven models.

MS. HENDRICKSON: That's right, proven models, and I mentioned in particular, the acid rain program as one example and the benefits of markets as an example of models that we should consider.

COMMISSIONER COLGAN: Thank you.

CHAIRMAN SCOTT: Anything further?

(No response.)

Great. Thank you.

MS. HENDRICKSON: Thank you.

CHAIRMAN SCOTT: Appreciate your being here
today.
We are going to turn our attention now
to compliance strategies, and for that we are going
to call on a couple of folks who are experts in
their field, and we appreciate them joining us,
Franz Litz and Jonas Monast.
I will just tell you a little bit
about them as they're coming to the table. Franz
has 20 years of experience in energy and
environmental law and policy matters and government
business, and Jonas has an organization, and we've
worked with Franz in various capacities in the State
of Illinois while he was with the World Resource
Institute and with the Pace Environmental Center and
now with the Great Plains Institute where he
currently works.
He also worked for the New York State
Development Environmental Conservation and was part
of the development team in the Northeast that worked
on the Regional Greenhouse Gas Initiative where
REGGIE is and you heard about today and in other
policy sessions as well.
So Franz brings a wealth of experience and also has been working with us currently on some of the multi-state stakeholder groups that we have been working on specifically with respect to 111(d). So we appreciate Franz being here as we do Jonas. Thank you very much.

Jonas is director of the Climate and Energy Program at Duke University's Nicholas Institute for Environmental Policy Solutions. He works on the interaction of state and federal energy policies regulatory options for reducing greenhouse gas emissions in the inter-sanctions of financial market climate resources. He also teaches courses on the inter-sanctions of energy and environmental issues at Duke University's law school and Nicholas School of the Environment.

Previously Jonas worked as an attorney on social responsibility and graduate of Colin Cove, LLP, and also served as a congressional fellow for the late Senator Paul Wellstone and a legislative counsel for Center for Responsible Lending.
Jonas has worked with us on many different projects over the years and I know he's been doing a lot of work for some of the southern states specifically on these issues, so we thought he would give a broad perspective from a couple of views, as we heard the legislators talk today and we talked before in previous policy sessions about the rule itself, and what are some options for a state like Illinois to pursue, and what's going on in some of the other states as well.

Let me start with you, Franz, if I could. You mentioned the NODA, the Notice of Data Availability, if you could just briefly explain what that is. We tried to talk about the rule itself in the earlier sessions, but since this is kind of a new development along that line, and then if Jonas has some thoughts as well, if you could briefly outline what the EPA is looking for in terms of comments.

PRESENTATION

BY

MR. LITZ:
Absolutely, and thank you,

Mr. Chairman and Members of the Commission. It's very good to be with you again, and it's an honor to follow the other public servants who are here, members of the General Assembly and the representative from the AG's office were really interesting to listen to the comments and concerns, and I should say it's a pleasure to be here with Jonas Monast from the Nicholas Institute where they do really tremendous work and got me thinking in this area.

So on the NODA, the Notice of Data Availability, that came from the EPA, the way to think about this is EPA issued a proposed order on June 2nd, and it was their big proposal, 800-some-odd pages of preamble, that set out what the carbon standards might look at for existing sources and then from that point they started to have meetings and hearing comments from stakeholders.

The NODA, or the Notice of Data Availability, represents their official take, if you
will, on some ideas that have come up from various 

stakeholders, and so they heard some ideas and they 
said, well, we only heard them from these 
stakeholders. Let's see what everybody else thinks 
and their ideas and also concerns related to the 
proposal.

So let me tell you what they are. 

They boil down to three things eventually. The 

first is there have been concerns raised about the 

way that the stringency kicks in under the standards 

and that in many states there have been -- there are 

concerns that the standards kick in too quickly. 

So EPA has heard some ideas about how 

they might address that and spread out the 

stringency and make it more gradual. They use the 

term "slide path," and the two ideas that they 
present are to allow early reductions so you would 
have credit for things that happen between now and 
2020 and allow those reductions to count toward 
compliance in 2020. 

The second idea would be to phase in 
more slowly the part of the standard that was set
based on a shift to natural gas, so don't assume it could all happen right away, have it phased in over time. Also the part of the standard that relates to the improvements or the efficiency of improvements, that can happen at both plants.

So this set of ideas related to tempering those interim targets one could say analytically would tend to lessen the stringency of the standard to make it easy.

And the second point that they're reacting to are concerns about how the renewable energy portion of the proposal from June 2nd was laid out, and they have heard from various states that some states seem to have a big burden under that method and other states seem to have very little burden, and they heard an idea to sort of tinker with the way that the renewable goal will be set for states and they'll do that by -- or at least the idea they're floating is that they have a regional target and then they would allocate that target among different states, and they identify some ways they might do that.
One could look at this concern and the idea that EPA is floating as a way to perhaps level the playing field, and Illinois’ goal relative to some of the other states sort of falls right in the middle, but there are states like Minnesota where they really fall quite high in terms of stringency levels and other states that fall quite low, but what we could expect if the EPA follows this second point is that we see some state targets get more stringent and others get less stringent perhaps.

The third thing they focused on in this NODA is the consistency in the way that they calculate the state goals, so you know from this really terrific process that you have been going through here, as you listened to stakeholders and you listened to other experts, that they looked at heat rate improvements at coal plants. They looked at a shift in natural gas. They looked at renewable energy, and they looked at energy efficiency across four building blocks.

When they looked at a shift in natural gas, for example, they assumed that natural gas
would replace existing coal generation; however, when they got to the part where they were figuring in renewable energy and energy efficiency, they did not assume any displacement of existing fossil resources.

That's the point of the third area where they're taking comments and they're suggesting that perhaps they should -- they should treat renewables and energy efficiency consistently the same way that they do natural gas.

The effect of this idea, if they were to implement this, would be to increase stringency across the board, and so what you have here across these three issues are one which could lower stringency across the board.

The second one would probably result in some change in the distribution of the effort across various states, and, third, would tend to increase stringency.

The net result is we don't really know whether these ideas would tend to increase stringency overall, or keep it the same, or lower
it, but EPA does talk about offsetting the affect of
these different ideas, which does suggest to me
anyway as a reader that they're interested in
perhaps leveling the playing field, addressing some
of the glide path issues the way that the standards
phase in but not necessarily looking to increase the
stringency over all of the standards.

CHAIRMAN SCOTT: Can I ask one clarifying thing.
On the first point about stringency kicking in too
quickly, this is what we commonly hear about as "the
cliff" where, yes, your ultimate goal is your 20/30
target, but their interim goals that kick in 20/20
on a lot of states they are a substantial portion,
if not way more than half of the ultimate goal that
you have to hit, and the fear is that one of two
things: One is states just won't be able to meet
that or that will lead states, because it's the only
thing they can do on a fairly quick period of time,
to ramp up natural gas in a substantial way.

Is that a fair characterization of
that?

MR. LITZ: Yes, that's right. I think both on
the industry side there was a concern that you might end up straining assets, and some of these coal plants have seen recent upgrades which have cost money, and if you stop using those plants right away, then that's money that's less stringent there.

On the environmental side, there's also concern there would be a rush to natural gas at the expense of some of the others, and perhaps even lower cost alternatives, like energy efficiency where you need more of a lead time, and a lot of these states -- and Illinois is probably not one of them -- but in a lot of these states that are really just starting to have energy efficiency programs they need some time to ramp up.

CHAIRMAN SCOTT: And so both of those issues might be addressed through the kind of smart glide path approach that they're making comments.

MR. LITZ: Yes.

CHAIRMAN SCOTT: Jonas, did you want to add anything to that in the form of the states you are working with and how you see those issues or if you see what EPA may be getting as the same as Franz
MR. MONAST: Let me take the last part first. So I think the system administrator emphasized when they released the NODA not to read anything into it. I think what she said was not to read that EPA has any conclusion in mind to it, but you can read a number of things into it. First off, they are getting a lot of sophisticated feedback asking very tough questions that the EPA knows they have to think about more.

I think another is they're not just getting push back from opponents of the action under the Clean Air Act, but they are actually getting some push back from proponents in that they think that energy or renewable energy was not treated in a way that it should have been treated, so I think it's probably safe to assume that the final rule will address the points that are being raised by the NODA.

I think it's important for people in this room to not leave here thinking that the EPA has something in mind or at least that there's any
signal that they're giving through the Notice of Data Availability at this point, so we are still in the comment period.

I think the EPA is hoping to get, in addition to sophisticated comments, the questions that it asked on June the 2nd and also sophisticated responses to these questions as well.

CHAIRMAN SCOTT: Let me ask one more question, because one of the other things we and a group of Midwestern states have been working and asked for and a lot of people have, too, and it came up earlier in the comments, so I want to ask you about rate base versus mass base and the calculations on how to do that, and we kept hearing that it's soon and going to happen soon, and then there was somebody who talked about it -- they did it today -- that they're going to do it today.

Have you seen, or have you heard anything, or is there any likelihood that we're going to see that? Because the key point for that is a lot of states want to try to decide what works better for them, the rate base or mass-base
approach, even though one is allowed under the rule.
If you don't know exactly how to do the calculation,
you may end up making very bad assumptions.

MR. LITZ: Yes. The way that the proposal came out it had rates on a page, and certainty you can look at that and say, hey, that's my rate and I can figure out what I might do at that rate, and then there was a somewhat amorphous way to convert that rate to mass and the issue is people looked at that, including us. We looked at it and said, gee, there's a lot of wiggle room in here and a lot of questions unanswered.

So in response to that, the EPA said that they'll issue some more information on rate to mass, but I don't think it will come out unless somebody checked on their phone.

A VOICE: It just came out, Franz.

MR. LITZ: All right. It came out, so we should have more information on that.

The thing I want to emphasize is that it's suppose to be no less stringent than the rates.

So if you go mass base, then I'd listen to your
stakeholders in this process and then also some of the legislators here today. It sounds like on balance there's a lot of folks interested in going mass base.

The way it's suppose to happen is that if you go mass base, it's no less -- it's suppose to be the same. It's suppose to be the equivalent as the rate, and so we'll see when we look at the methodology whether folks when they crunch the numbers they agree that you end up with a mass base target that's pretty much asking for the same level of effort that you have to do under the rate.

CHAIRMAN SCOTT: Jonas, do you want to add anything to it?

MR. MONAST: You know, it's not that we don't know what it says.

CHAIRMAN SCOTT: Let me ask just kind of a general question, then I want to get us into some more specifics about some of the other states that have been referenced many times today and in our earlier sessions.

Jonas, just in terms of, you know,
some of the states that you're working with, not by name or anything, of course, just the states that you are working with, maybe some of the range of possibilities that they're considering, because we can all look at it individually and say, you know, what may work in our particular state, maybe just what some of the states are looking at, how they're looking at compliance with this and what multi-state approaches enter into the discussion.

PRESENTATION

BY

MR. MONAST:

I would be happy to. First, let me echo Franz saying thank you. It's a real honor to be talking to you, and I think that the Commerce Commission should be commended for thinking, you know, really for quite some time about this very complicated issue, and some of the things you are doing and some of the work that you are involved with here in the Midwest is really informing other parts of the country as states are also starting to tackle some of these questions.
We at the Nicholas Institute quickly our role really is to be a bridge between policymakers that are struggling with these major environmental policy questions of the day with the resources that academia can offer to help to make sure people have access to objective information when they're making these big policy decisions.

It's hard to come up with a more vexing problem at this point than how do you deal with CO2 emissions from the existing power sector using a statute that was written quite some time ago before greenhouses gases were in the mind of Congress.

I think that in the states of the Southeast our engagement with the states in the Southeast is really starting with helping them understand where the electricity sector may be going anyway and it is really important to put 111(d) in that context. It's not a question of whether the sector is going to change or not. It's a question of how and the fact that Section 111(d) is being proposed and presumably finalized.
Really while we are in the earlier stages of a very major transition in a electricity sector and the fact that 111(d) is being framed in a way that it leaves a lot of choices to the states, it can provide a tool for helping to manage some of the transition that may be taking place.

So, for example, Georgia is going to have a lot of solar coming on-line. Georgia is investing in energy efficiency, and Georgia also has nuclear power coming on-line.

What Georgia's response will likely look like under Section 111(d), you need to understand what the energy sector is going to look like in 2020 and 2030, and I think that's a common challenge for states at this point is trying to figure out not just what Section 111(d) requires but where the energy sector is going to be anyway, how much more Section 111(d) needs to do.

Some of the commonalities I think between the region where I work and Illinois, we have different regulatory systems for the electric sector, so we are currently integrating states on
there, but we do have some very large utilities that cross state borders, so there's an analogy in the way that electricity flows across borders, and dispatch decisions are made in a multi-state framework that looks somewhat like the RTO-type approach.

So if you are thinking about managing CO2 emissions across a utility's service territory, that's leading some of the states in the Southeast to start thinking about multi-state, because that's the way the electricity system is dispatched anyway.

Knowing that, just to use North Carolina and South Carolina as an example, if North Carolina and South Carolina do different things, like Duke Energy, the Carolinas operate across both, most of North Carolina and a portion of South Carolina, that could put North Carolina and South Carolina policymakers in a position where they may care a lot about where Duke Energy builds a new solar farm or potentially nuclear facility where there's coordination between the states, some type of market-based approach where there's other
strategies, then the states may not need to weigh in on the decision about where it's being built but may need to focus on whether it's being built.

So I think probably earlier in the exploration process and I suspect that you at the Commerce Commission and others here in Illinois are grappling with some of these questions like where is the electricity sector going, what are some of the risks that we need to pay attention to in our region and try to develop some of the information, they can help answer those questions.

We, at the Nicholas Institute, are doing some exciting economic modeling that will be available. Unfortunately, they're not available yet, but by the end of this year, early next, really comparing state-by-state approaches to regional approaches and comparing mass-based approaches to rate-based approaches on a state and regional level, I think looking from us and other groups that are doing modeling, there's going to be a lot more information that's available in early 2015 that will help you with your comment period but I think will
help you start thinking ahead about how you may
respond to the final rules.

CHAIRMAN SCOTT: Franz, let me ask you a couple
of things first. You've been working with a lot of
states in the Midwest, a lot similar to what Jonas
was talking about, but then also going back to the
REGGIE example way back for you, and I think there's
some type of confusion about what REGGIE is, and
what it isn't, and how long it took to set it up,
and why it might have taken the amount of time that
it did.

I think that's instructive for us,
because I hear a lot about you can't do anything
multi-state because it takes too long to do it and
those kinds of things, so if you could go into that
just a little bit.

MR. LITZ: Yes. Sure. So with the mid-continent
states environmental and energy regulators group,
which is 14 of the 15 mid-continent ISO, states with
operations in the mid-continent ISO, that group, so
I'm reflecting on that. I'm also presented at one
of the gatherings of Jonas' group in the Southeast,
and I convened a group of stakeholders in the Northeast Mid-Atlantic around REGGIE commenting on 111(d), and so I say all that just so that to lead into the next point which it's striking how common the interests are across the various states, and it doesn't matter if you have a very conservative Republican governor, or a really lefty Democratic governor. Everybody cares about costs, you know, and it almost -- it doesn't matter where you are. That's the first thing that comes up. How can we do this at the least cost? How can we maintain reliability? Keep the lights on, really all of those things that your legislators said today.

It's pretty amazing. I think you are really well set up to develop the perfect solution for Illinois, if the minds in this room are any indication, but how do we stimulate good jobs? How do we remain consistent with the way our grid operates -- a lot of comments today about the two RTOs that Illinois is in. How do we keep our current assets from being wasted, you know, whether that's a coal plant that you just invested in or a
nuclear plant that you have on-line that are not emitting or some of which are in trouble, you know, economically. How do we keep them going and how can 111(d) help in that?

So those are very common objectives that we hear across a lot of states, and what I think that means is that there ought to be good prospects for states coming together around solutions under 111(d) because you are trying to meet the same objective presumably and, you know, with the same instrument.

What I can say from the REGGIE experience is that there's a way to do this. I think that doesn't give up your state autonomy. So every state is a different state, and it's just as if you are looking at M-Tier Group (sic). You have got a lot of states that don't agree on a lot of issues and a lot of issues across the board, not just in energy and planning, and they all have legislatures and in addition different governors.

So you need a process where you, as a state, can decide on a model and work towards
developing and implementing that model in your state and keeping open the option that it can connect to your neighbor or another state as well, if that turns out to be what you think is in your best interest. The REGGIE model isn't far from that.

I'm a lawyer, as you know. The way we lawyers look at it is in terms of state sovereignty of the different states. REGGIE operates with separate rules and laws in every state, and so if eight of the nine states could vanish, and the one state would still be left with a rule and with legislation on the books and the rule on the books, the only thing that connects them from a legal perspective is that each state recognizes the currency from the others, and that I think ought to be instructive to any state that is thinking about wanting to keep open the option to linking to other states. As long as you have it so that you have a currency that you can exchange and allow the other state to use, then you are in good shape.

COMMISSIONER COLGAN: What was the REGGIE recipe that the REGGIE state came onto that allowed them
into kind of an agreement? You mentioned Georgia and North and South Carolina. I'm thinking about states' rights issues and how there's not a lot of communication across borders. You have the electrons that are going back and forth across borders. How do you bring those two -- I see a different world, a political world. I see an environmental world. I see electric policy.

All of that stuff is just bumping one another. Who is it? Did somebody do the work in the REGGIE states or was it just a quirk of fate that they were able to talk a similar language and come to some sort of agreement? I guess I'm interested in the climate and energy program that you worked on there, Mr. Monast. Is somebody trying to do that kind of work in terms of getting people talking to each other?

There's probably about five questions in there, but I'm just really concerned about -- it seems to me like the multi-state solution just really would be a good way to go, but how do you get states talking to each other?
MR. LITZ: So, yes, there were a lot of questions in there, but I guess what I would emphasize the different REGGIE states have no authority over each other. Each state kept its severity, so we saw that. We saw Maryland joined late, for example. They joined after. Even Pennsylvania has said -- the governor-elect of Pennsylvania said he wants to explore the option of joining. That's possible. And if there's an enforcement issue in one state, that's the issue in that state, and it's not anybody else's business.

I would state that just needs to be the case, because we have no such thing as a regional government. We only have state governments and we have national governments.

So was it hard? It was harder in that context for us to reach agreement I think because there was no driver. There was no federal requirement that people needed to try to meet in a least cost way, and so it was a voluntary thing. It's getting people to agree on stringency in that context is tougher.
I think it would be easier in this environment where it looks like we are going to have a rule, and even so people at these regional tables are in states where the states are going to fight like hell against this rule and they're going to try to knock it down, and they may be successful, and it will all be done, but they're very practical people and they're saying we might not win that battle, and, in the meantime, we want to make sure our consumers are protected, and our sector is protected, and we have a system that's going to work, so we are going to think about a multi-state solution in the meantime.

I'm here to tell you that you could do it without giving up any of your state sovereignty or having another state try to enforce against you.

COMMISSIONER COLGAN: So do you think that the states are actually seriously contemplating how to work together? Because if you look at the signal, there's a lot of noise about the rule itself and how it's just going to be put down, and so it's hard to imagine how a state is working on ways to comply
with the rule when they just want the rule to go away.

MR. MONAST: A few responses. I think very good questions. First off, I think it's important to recognize that states do cooperate and collaborate with one another in lots of context.

So in the Charlotte/Mecklenburg metropolitan area that span North Carolina and South Carolina dealing with non-attainment, the environmental regulators already have to interact. The Public Service Commission in South Carolina and the Public Utilities Commission in North Carolina don't collaborate, but they are certainly aware of the decisions that they're making regarding Duke Energy generation and what that means on both sides of the border.

And because we have utilities that operate in a multi-state format, where I'm coming from is where you have regional transmission organizations here that all cooperate on a multi-state format. The answer to what is the least cost way of complying with the legal obligation
While maintaining affordable and reliability, that may suggest that the natural answer is multi-state anyway.

One of the things we have been trying to do in the Southeast, and, again, it is not unique to us and Franz as well, is paying attention also to why. So you can really get caught up in the complexity of how would you do multi-state collaboration.

If you ask the question why, what are the benefits of doing it, there are a lot of different options once you decide that that's where you want to go.

So in doing something that is as structured as REGGIE or walking backwards on the spectrum from that, what Franz is suggesting that there could just be common elements. You could have renewable energy credits that count in multi-states and that actually leads to a multi-state cooperation, nuclear energy credits, something along those lines, all the way to just simply following the territory or the RTO territory how electricity
is dispatched and just try to pay attention to creating a coordination across those regions.

I guess my main point is there's a lot of frameworks that are already in place that could help facilitate collaboration. I think one of the big important points that you all are ahead of a lot of other states thinking about why and really focusing on this multi-state as an issue that deserves more consideration than maybe it's getting, because a lot of state regulators are very overwhelmed by the complexity.

It's very hard to understand how to make choices when they have so many choices available to them and little qualitative analysis helping them to reduce it.

CHAIRMAN SCOTT: Commissioner McCabe.

COMMISSIONER McCabe: The chairman asked about REGGIE, which is kind of a cap-and-trade approach. Can you talk about other ways states are pursuing complying?

MR. LITZ: Sure. I would say just that -- I also will just quickly respond to Commissioner Colgan, if
I could -- there's a way to -- the MC states that make up, as they call themselves, "mid-continent states," including Illinois in this discussion, refer to it as the "no regrets approach," and the reason it's no regrets, for everybody to get in the room to talk about how to comply, it helps you figure out what you might do, because you are going to be alone in the final analysis, and also if you are going to do coordinated plans, coordinated individual plans, then you need to know what the other states think about what you are thinking.

So you are going to have a ton of your currency or emissions credit and you ideally want to have a program that other people are going to like enough that they take your currency and then you would have that kind of mutual relationship across state lines, so it's no regrets because you are not deciding anything until the end. You can back out at any time.

I fully expect that it will always be based on a state's self interest. They are going to know what their interests are. They are going to
know what their stakeholders are saying, and they
are going to say, given all of that, it either makes
sense or it doesn't, and if it does, they're in, and
if it's not, they won't be.

So REGGIE is an emission budget
training program where eventually the states would
take its rate base and convert it to a mass-base
goal and then they allocate out portions or they
allow to sources who have to use an allowance to
cover every time there are emissions, and that's cap
and trade.

There's other ways you could do it.

One suggestion coming from one utility in the upper
Midwest is that you could allocate those budgets to
each entity and say, all right, utility, you manage
your budget. You decide whether you need it or not
and you use it and any tools at your disposal. That
works better in a vertical integrated context where
the utility owns the generation assets. It wouldn't
work so well in a deregulated state like Illinois.

A middle-of-the road approach to that
is the cap and trade, and that would be to say, all
right, let's grant you your budget each entity, and then the state could say we are going to let trading be optional and the entity could choose to opt into trading or they could choose to just manage their budget without any kind of trading.

In some ways that's similar to the way that MISO works, you know, utilities decide whether they're in or they're out or entities decide whether they participate in the MISO or not, so it's kind of voluntary submission to the market, so those are the three on the mass-base side of things.

And then on the rate-base side, the rate-base side of things is a little bit more difficult for states that have the nuclear because under the proposal anyway, you could -- you are limited to what you can credit in terms of nuclear. You can credit up to 6 percent at risk nuclear, and so you couldn't have nuclear credits beyond that amount, which I think makes rate base a little bit less attractive if you are trying to support existing nuclear plants, which I know a lot of your stakeholders and you are in this state, but on a
rate-base side you take the rate that EPA gives you. You apply it to each source, and then you say if the power plant generates at an emissions rate higher than the prescribed rate, they have to turn in the credit in order to lower their emissions rate, and if the power plant generates at lower or better than the emissions rate that's prescribed, they would earn credits and be issued credits that they could sell to others.

You could then have an energy efficiency and renewable energy component where you give credits, and also the 6 percent nuclear credit where they can also feed in the credit energy renewables to help plants that need the credit to get to the prescribed rate, and that's kind of a training mechanism, or in that case just like in the mass-base side, you could just say, entity, here's your rate needed across all the plants that you own and then they can figure it out. That again works best in a perfectly-integrated context where the plants are owned by the utilities and less useful in a deregulated context.
That's just a quick run through of rate versus the mass and some options. I probably missed some.

MR. MONAST: I think that was a good summary. I heard as part of your question whether other states are considering as compliance strategies. I mean, I think I can't speak for the states that I work with, but my sense is that they are a long way from deciding what the compliance strategies might look like. They're really trying to focus on what does the proposal mean for their states and trying to get feedback from the stakeholders.

I think the period between the end of the comment period and the final is the period where other states I believe are going to start focusing on what the different strategies are going to look like.

CHAIRMAN SCOTT: You have got compliance strategies, because we heard earlier on in our policy sessions you don't have to follow what the building blocks set out or allowed to do it. So a state could say, yes, we are suppose to get
6 percent or 6 percent from efficiency in our coal plant. We don't want to do that. We want to ramp up gas more. We want to do more in terms of energy efficiency with the local.

So a state can make those options by themselves or states could do -- when we start talking about multi-state to state could do things that have a piece of multi-state action, not necessarily an entire multi-state program that covers all reductions. You could do trading on renewables, for example, or you could do trading on just a piece of it.

MR. LITZ: If you choose a rate-based approach or mass-based approach, you wouldn't be trading efficiency, or if you want a rate-base approach, you could -- it seems almost a given that you would -- since some of the renewables come from out of state that you would allow renewable credits to be transformed into 111(d) credits for renewables, but, yes, there's lots of different ways you could do it.

I would say -- and this has been mentioned by numerous speakers already today and I
think in the prior sessions as well -- the benefit of market-based approach is you aren't picking winners and losers. You are trying to say, all right, here's the approach and we are going to let industry decide where they can get the cheapest reduction, and that's almost by definition the lowest cost option, and you can through analysis, and Jonas mentioned modeling. Through modeling analysis, you could get a sense of what that's going to do for you.

If you took a capital trade approach, for example, you could buy into the electricity system and say what does the model project, how much renewable will we see and how much gas, and you can also look at things like is it protective of existing coal plants, you know, do we see retirement or do we not see retirement, do we see a decrease in utilization, do we use coal plants less, and so you can get a sense of all of that while you are doing your planning and thinking about your options.

CHAIRMAN SCOTT: And so in some of the states that you are working with, also, Jonas, I'm assuming
you are getting a variety. As you said, people are now starting to figure out what it means for them, but you have got -- not just you, but you have big multi-state companies as well.

Are you getting any sense as to where the companies are talking about this issue other than, you know, we're taking on the rule in terms of any kind of compliance options? Do you get any sense of that?

MR. MONAST: I've read the tea leaves, but not official proclamations. At the event that Franz mentioned that we had sat down in Atlanta in September, TVA, Southern and Duke Energy were the big regional drivers, the sense from each of them seem to be if we are going to have to do this, we would prefer to do it across our broad service territory rather than on a state-by-state approach, but, as far as taking a position on rate base versus mass base, I haven't heard them do that yet.

CHAIRMAN SCOTT: So there's a couple of other things. I appreciate your list of options that I wanted to get into. So a state could or a group of
states could just set a price on carbon as well and try to deal with it that way, right?

MR. LITZ: Yes. There was a proposal that was jointly developed by the Bradley Group, which is a well-known economics firm in Cambridge, I think, and the Great River Energy, which is one of the larger coops, and they operate in North Dakota and Minnesota. They were looking at ways how you could implement 111(d) by putting a price on carbon that would essentially be added to the generator's bid into the independent system operator, and so the state would set the carbon charge or a group of states would test the carbon charge and then they would develop a mechanism that would move that carbon charge up and down depending on whether it was getting the results that were desired, so that's one option.

There are some challenges with that and you could hear it in the implementation that I've described. You need to get the states to come together to initially cut the carbon charge. You need to have legislators in all of those states to
kind of empower the people who would make that choice and then they would have to agree to the mechanism that would move up and down.

In contrast, if you have a mass-based approach in all those different states, each state could have its own budget and allowance system. It could stand on its own as a matter of law. The legislature could allow it to happen or direct the environmental agency to do it, and then the price would be a function of supply and demand. It would be set by the market and not by the state and it would have the same impact in the ISO.

So those allowance prices you may hear more about from the two gentlemen who are here from MISO and PJM because they know this stuff very, very well.

CHAIRMAN SCOTT: They look like they're jumping at it.

MR. LITZ: I'm really looking forward to Paul and Brian.

So what happens there is that an allowance price gets added to the bids of each
generator and functions in a similar way in that it affects the dispatch of the units, because the carbon charge -- because the dispatch is based on the cost of all the operating costs put together for each unit and then stacked on top of each other.

CHAIRMAN SCOTT: Commissioner Maye, go ahead.

COMMISSIONER MAYE: I just was curious that in overall terms of general perspective, for example, sometimes they're 96 percent coal and actually I believe they're going to meet, you know, these requirements and they're going to be in compliance, which is great, and then there are other states, which is 90 percent control, who is totally pushing back because we're not going to meet it. Have you all heard where any major states are pushing back and maybe feel like they can't meet this or anything like that?

MR. LITZ: There are a lot of states that are pushing back for one reason or another thinking that they have either too stringent of a target, or the time line is too tight, or even that the EPA is misreading its authority in the way they're
I think that part of it -- I don't want to place a value judgment on any of that, but I think some of it is based on some misinformation that was created by the way the EPA rolled the proposal out.

So if you compare the state target based on a static 2012 number and you just simply look at what the requirement is suppose to be in 2030, that's where you get the 30 percent reduction, the 40 percent reduction at the state level.

If you take that number a step further and you figure out how is the electricity sector going to change between 2012 and 2025 and compare that to your stated target, then the number for the most states is much, much smaller.

So I think some of the opposition is perfectly legitimate. I think the timing for the requirement of the 2020 issue I think is very legitimate to take on, but part of it the states need more information in order to really hone in on the parts that they push back on. I think some of
the big numbers, the 30 to 40 percent numbers, comparing apples to oranges, distracts from the real issue what one needs to do.

CHAIRMAN SCOTT: Let me amplify that a little bit. When you say that the way that the power industry is already headed in the state, you are talking about retirements that are planned or that may be planned, or renewable programs that are up and running, or energy efficiency programs that are already on the books that are anticipated to be working during that time period? Is that the kind of thing that you are --

MR. MONAST: Absolutely. Thank you for clarifying. Just to use Georgia as a good example, when the Vogtle (sic) reactors go on-line and when the -- just this year the BSC approved an additional 750 megawatts of solar to go on-line -- when all of that comes on-line, then the electricity sector of Georgia will look very, very different than it did in 2012.

So if you are focusing on the 2012 number that the EPA used, it does need adjusting.
If you focus on the number the emissions profile on Georgia, especially from the existing, after those changes take place, it looks different than if you were just paying attention to the 2012 numbers before those changes took place.

CHAIRMAN SCOTT: Let me ask something as a follow-up on what you say now, because as individual states look at this and how the impact is going to be on their own particular state, say you have got a state like Georgia that looks at what you just said and what Kentucky has done, or if even West Virginia's white paper, given the trends that are happening in states, that can be met fairly easily, would a state -- would there still be a reason in those instances for a state to look at multi-state solutions or something different even if it looks like, yes, we can probably hit those numbers?

That's for either of you or both of you. Would it still makes sense to look at multi-state options?

MR. LITZ: Well, the economists are going to be up here. It would be great to hear the answer to
that question. I will leave that question to them. People like to talk about winners and losers in a multi-state -- in a multi-state context. It might not be the right question who's the winner and who's the loser, because if you are the state that ends up buying more credits or buying more allowances, you've just gotten the cheaper way to comply than you would have had if you weren't connected to the other state, but if you are the state that ends up selling the allowances, you know, you may actually -- those allowances may cost more than they would if you were just alone, but you would have given up the opportunity to sell allowances and implement them.

So you can think of the multi-state trading in the same way you think of multi-state electricity trading. It's a market, and some people are going to be sellers and some people are going to buyers. The overall cost is going to be lower. That's what the economics tell you.

Supposedly everybody will be better off, but that's not the economics of it, and then I
think people are going to have to look on a
state-by-state basis at the way other things play
out, like what does it do to my coal plant? What
does it do to my renewable plant? Does it mean I
need new transmission, that sort of thing.

COMMISSIONER McCabe: Don't you have to look at
it over time? What's true in the shorter time may
not be true in the longer time.

MR. Litz: Yes, that's really a good point. If
you choose to go it alone as a state and you design
a program that's not linkable to another state, you
sort of box yourself in based on the current
snapshot that you see, but we know it's a dynamic
situation. The market is changing on its own. You
may later think you would have been better off being
part of a larger market.

The other thing I just want to add,
and this goes to Commissioner Maye's comment, what
we can say about the NODA, and I didn't say this,
but the supplemental release is the state targets
are going to change I think we can say. Before that
there were some people who said EPA is going to
change a lot from the draft to the final and others said I don't think they are going to change it very much, but the way I look at the NODA and they're taking comments on a lot of possible changes to the state goals and so the states that are currently sitting with what may be perceived as easy goals to me may have tougher goals in the final, and the states that are feeling like they got punished or really picked on might feel a little bit better with their changes.

So if you see a just level of the playing field, then the start for you is to see less stark differences across states and that would probably encourage multi-state cooperation.

CHAIRMAN SCOTT: Let me just hit one final point in five minutes, then you have got to leave, and again thank you very much for being here. This is enlightening us and helping us sort through the different options.

Jonas, you mentioned that, and, Franz, I believe you did too, working with states that are looking at multi-state options, then for me the
question becomes am I better going alone or am I better multi-state in terms of cost and reliability issues and things like that.

Have we seen some studies that have come out to what we are seeing nationally looking at them? Directionally, I realize that you don't have all the data and all the things you need to do, but directionally are there some lessons that I can already look at that way? I know there's some directional issues on whether states are better off in multi-state versus an individual state. I realize it may be different for every --

MR. MONAST: That's a really hard question to answer, especially at this point. I think in a few months, when there are a number of different organizations that are releasing modeling results using different tools, there will be different answers kind of looking to different commonalities. It may be easier to answer at that point.

Right now I think one of the commonalities is that we already have an electric sector that where electrons flow across borders and
so it's not really -- the question is is there going
to be interaction among states. The question is
how? And is it going to be deliberate from policy
mechanisms or are we just going to let actions in
one state affect the price of electricity through
dispatch choices in another state?

I think that, you know, I don't want
to offer an opinion about what the economic modeling
is going to be, because when those numbers start
coming out, people are going to focus on the
numbers. We want to make sure we have it right
before we start signaling what's on the modeling.

CHAIRMAN SCOTT: Sure. A lot of it will depend
on the assumptions on modeling. Are you applying
just compliance the way the building blocks are or
are you doing it getting individual information from
each state as to what direction?

MR. MONAST: I heard Paul from PJM make the point
a while ago before the proposal came out that if
each state is doing something different, that makes
it very complicated to make dispatch decisions
across a broader service territory.
If the goal is least cost -- and,
Paul, correct me if I'm mischaracterizing what you
are saying. If the goal is least cost, then having
a vulcanized approach where each state is doing
something different, then that could be
counterproductive in doing least cost management.

CHAIRMAN SCOTT: Franz, did you want to add to
that?

MR. LITZ: Yes. That raises a point and that is
we tend to think, well, we could go it alone, and
would it be better if we didn't or if we went
together with others. There's also the question of
if we go it alone and everybody else goes it alone,
what kind of a mess do we have or, you know, stated
more objectively, what does the situation look like?
It could be messy and it might be just fine, but
there might be a cost of going it alone that when
you look at the results of that analysis, you might
say, well, that's not palpable. I can't. That's
something I don't want us to do. I really want to
get those other players at the table with me and to
agree to a common approach.
CHAIRMAN SCOTT: Commissioner Colgan.

COMMISSIONER COLGAN: This issue of modeling, there's all kinds of -- seems like lots of different groups doing modeling and it seems important that some sort of assumption that you use, should the modeling be the same or maybe even using the same software approach and so you can come out with results that would be comparable, one result comparable to the others.

Is there communication going on at that level or is there just everybody picking their way or going about it and coming up with their outcomes?

MR. MONAST: That's a great question and a great point. So I'm not a modeler. I'm a lawyer, but my colleges are actually doing the modeling and they're in touch with a number of other people asking similar questions using different modeling tools. We should assume that before the final rule comes out there are going to be a lot of organizations that are putting out numbers based on modeling.

What is going to be really important
there is the transparencies, understanding what the assumptions are, because we will each make different assumptions.

We at Duke, because we are doing this without a consulting firm, we will be fully transparent with the assumptions that we are making. We'll test that. Other organization's range of transparency will differ. I think that's important. You are asking exactly the core questions. Once these numbers start coming out how do we compare them to another? And I think this is such a complex question. How do you model electricity sectors at the state level, thinking when all these different policy levers that states may choose to pull or not.

I think this first round of modeling will be coming out in the next few months and at that point you all can start asking common questions.

MR. LITZ: The thing I would say there is it doesn't relate. You are absolutely right.

The M-Tier Group (sic) at Great Plaines we're partnering with the Bipartisan Policy Center,
and the Bipartisan Policy Center had some modeling using IPM, the Integrated Planning Model, that the states will then look at and presumably say I agree with this assumption or I don't agree with that, then wait to even get more confidence in a modeling analysis like that would be to expose it to as many eyes as possible, and you have your utilities look at it. You have your generators look at it. People who are experts they start to poking at it and they eventually get to a comfort level where you have analysis that's been tugged at and criticized and you will know its weaknesses, and no one else is going to tell you all the answers.

We don't know. We can't predict the future, but you'll kind of get a sense of where if you -- for example, if natural gas prices are higher, then we could expect the future to look differently this way, or if energy efficiency doesn't turn out to be as available as we think it is, you see a different future.

So you are right on. Modeling analyses there will be a lot of them. The states I
think are going to have to have at least one set of
analysis that they really put through the ringers
and that they can feel good about even when they
make their decision about which way to go.

CHAIRMAN SCOTT: Thank you very much. We really
appreciate it. A lot of great information. Thanks
for traveling to be with us.

We are going to take a break until
quarter after, then we will come back and listen to
the RTOs. Thank you.

(Whereupon, a break was
taken.)

Ready to get started in just a moment.

If you could find your seats, we are going to get
started. We are going to get started again, so take
your seats.

COMMISSIONER MAYE: Have your conversation
outside so we can get started. Guys, we are going
to get started. Please step outside with your
conversations. Step outside so we can get started,
please.

CHAIRMAN SCOTT: Thank you very much. We want to
give the folks from RTO as much time as we can and
still get everybody out of here on time.

I do want to mention because
Commissioner Colgan's on the state plane, he's going
to have to leave at about a quarter to five, so we
want to give him an opportunity to hear as much as
possible as well.

So our last session here, now given
all that we have heard, both in the first two
sessions, then from the legislators today, and then
also from our clean air experts, let's talk about
the RTOs. We have heard a lot about TROs and ISOs
and how the power gets dispatched, and I think we
want to have a discussion with Dr. Paul Sotkiewicz
and Brian Rybarik.

So Dr. Sotkiewicz works for PJM and
has been in front of us on many occasions and we
really appreciate he and Brian, who's the regional
director of Government and Regulatory Affairs for
the Mid-Continent and Independent Transmission
System Operator, or MISO.

So what we want to do is allow them
each to take maybe five minutes both in terms of talking about this issue generally, and/or reacting to things that they might have heard today, and then we'll get into more of a discussion about some of the issues that we have heard.

So, Paul or Brian, whoever is going.

Brian, you are going to go first.

MR. RYBARIK: We row sham bowed for it.

PRESENTATION

BY

MR. RYBARIK:

Good afternoon. Thank you for the opportunity to be here, Mr. Chairman and Commissioners. Even though I'm from Wisconsin, I will give you two reasons why I love being in Illinois. One is that you have a state agency named after a beer, the IPA, and, two, and you actually have a little bit of a close of a connection. I heard all the discussion earlier today about the nuclear plants here in Illinois.

My father was actually an engineer for General Electric, and so I come from a true nuclear
family. He installed reactors was his job, so I have lived throughout Illinois on installations, and while I know a lot of you have done tours of them, I doubt if many of you have done them in strollers, as I have.

COMMISSIONER COLGAN: We know the love you have for the Chicago Bears.

MR. RYBARIK: Naughty.

(Laughter.)

Well, we are here to talk about some of the advantages and disadvantages of regional compliance strategies with the clean power plant, and this really is a critical dialogue, and I want to thank the ICC, and particularly the ICC staff for putting this forum together, another step in the great discussion here.

Like Franz, I'm a lawyer by education, and even a little bit by practice. So given this, I think I'm obliged to start with a disclaimer or two and reserve my right to identify more as we go along in this discussion.

First, MISO doesn't have a position on
whether it's a good or bad policy to reduce CO2. We are very focused on fulfilling our mission of bringing value to customers and insuring reliability. Put another way, we look at this proposal and we ask are there ways we can work with our states, our stakeholders, and, indeed, our neighbors to implement whether the final rule is in a least cost reliable way.

Now disclaimer number two is we have to remember we are at the very early stages of this journey. I am going to share some of our initial analysis. We have done some modeling, and then I think we will get into some discussion of reactions and things we have heard on discussion earlier today, but I think we need to look at this through at this point a telescope rather than a microscope and recognize that there's a lot of discussion to come.

With those disclaimers noted, let's talk a little bit about MISO's initial analysis. We performed this using the electric generation expansion analysis system, or EGEAS, which is a
software program that evaluates generation expansion under certain parameters and inputs.

I know that the ICC is actually in the process of obtaining this model. Some of your staff members are down in Carl, Indiana, right now getting some training on that.

We use this tool to get us some initial reactions and observations about the rule. Some of them are very relevant to this regional or non-regional discussion, but I want to share three of them with you, and then we'll get into some more discussion with the regional solutions.

Observation Number one, and it was brought up earlier today, is this 2020 to 29 interim averaging issue creates potential reliability concerns in the 2020 time frame. That's what our analysis has shown us.

And while the rule appears well intentioned to provide flexibility, the fact of the matter is the math of averages requires much of the compliance to be 2020. As much as 80 percent is what we are seeing. And given the fact that you may
have to actually build new generations to meet that rule, if you do retire coal generation, it's just too proximate in time for careful planning and good decision-making.

And while the Notice of Data Availability that Franz talked about does provide a little bit of guidance on this, and maybe a little bit of hope that some changes will be made to this, given the importance of this, MISO will be commenting on this, and we plan to comment on December 1st. We actually just released our outline of our comments earlier today, so they are on our website for reviewing.

A lot of people refer to this as a cliff. I am a skier. I think of it as we're standing on a double black diamond, and what we really need to get to is probably a green slope or even maybe the bunny slope at this point. That's our first observation.

Our second observation is that compliance strategies outside of the four building blocks, something we are very cleverly calling "thinking outside the blocks" provides economic
benefits, and specifically the two that we see as being most valuable are retiring coal.

Our analysis shows that one of the least cost opportunities is to retire up to 14 more gigawatts of coal beyond what the maximum clients would do from a standpoint of resource adequacy that's obviously a little concerning as we look into the future.

The other is building combined cycle gas, and this is something that is in our observation is a confluence between the 111(b) rule and the 111(d) rule, as far as what counts in your 111(d) portfolio if you build it under the 111(b) rule. Thanks to Congress for making those two sound so much alike so we can even be more confused by all this.

Finally, the third observation I want to share, and this one really does get to the heart of today's discussion, is that regional solutions to this policy have economic benefits for customers.

We analyze the EPA's building blocks looking at the MISO footprint in all of our
15 states, and then also looked at it from a perspective of the local resource zone of which we have nine, so it's not an exact state replication but it is attempting to sort of get it down to a more granule level, and every time we compared those two cases, the regional solution was always less expensive, and in some cases significant, so up to 40 percent less expensive on a regional basis which translates to $3 billion of savings per year.

Cost is one thing. Operations and reliability are another, and that is really our mantra is reliability. While operation costs were not specifically analyzed with the GS model, that's not what that tool does for us.

Our experience shows that broader geographic footprint provide operational benefits, and the example I always think of is in 2006 MISO's footprint had about 1,000 megawatts of wind energy on it. Today it has about 14,000 megawatts of wind energy on it.

While we made some market enhancements to allow that, it really is the geographic scope of
MISO that has allowed that to occur and the
diversity that we see on the footprint that's
allowed that to occur. So a regional approach to
the CO2 mitigation probably brings that same
operational benefit as well as the economic benefit
I have just discussed.

With that said, that doesn't mean that
regional solutions are easy to implement. They are
a result of a lot of coordination, a lot of
learning, like what we are doing here today, a lot
of dialogue and a lot of hard work.

I had the privilege of serving my now
home State of Wisconsin as staff at the PACW as the
multi-state discussions went forward about the MVP
projects and the cost allocation associated with
those, and I saw first hand how complicated that
discussion could be when we are just talking about
the multiple RPS policies throughout the MISO
footprint.

This problem is -- I was going to say
arguably, but it's more complex than that issue, but
our initial analysis, as I just pointed out,
provides about three billion reasons for us to have these discussions on a very regular basis and continue this dialogue.

I think experience shows that hard work and maybe a few airline miles and hotel nights by a lot of people in this room can bring those benefits to customers, so I look forward to getting into more specifics of what that might look like from an RTO perspective.

I just wanted to share some of our initial analysis and also look forward to continuing this dialogue as we get more specifics from the EPA as apparently we did just today.

So I'll turn it over to Paul and let's engage in some more discussion.

CHAIRMAN SCOTT: Thank you.

Paul.

PRESENTATION BY DR. SOTKIEWICZ:

Thank you, Chairman Scott for the kind invitation to come back. My apologies for my voice.
Those of you who do know me, I am a University of Florida graduate and I didn't lose it before the Georgia game last weekend, so I apologize for that, and also with a Polish last name, it's nice to be back in Chicago. My dad grew up about two hours east of here in South Bend just short right on the South Shore.

I want to actually start off with the question that came up with members of the legislature that were in the room today. What is an RTO? A regional transmission organization is what it is, but really what is an RTO and what does an RTO actually do?

What an RTO does is it operates the bulk power transmission system for its passive owners, so traditionally utilities you will hear the Amerens of the world, the ComEd's of the world, as they have been, you know, in some cases swallowed by other companies now encompass part of Exelon own the transmission system, but they don't operate the system. That's up to the RTOs to do it, and the reason is the TROs don't have any commercial
interest in the markets. None of our management, our board, or our employees have any financial interest in any of our market participants. In fact, we are forbidden by FERC rules to have any financial interest.

If you think of the RTO, the TRO is sort of like a common carrier. If you go back to the old telecom days, you all remember telecom deregulation and all that. We are the common carrier, the transmission system, and the providers for the different services.

So what an RTO is we are facilitators of markets and we also are the party responsible for insuring the liability, the bulk power system, whether it's PJM within our footprint, which is all or parts of 13 states in the Mid-Atlantic and out here in the Midwest and all the way down to the banks of North Carolina to MISO, which has an even larger geographic footprint as PJM.

As the market operator without any financial interest, we don't have a dog in the hunt with respect to the size of the facilities. They
could be big or small. The age of the facilities, it could be brand new or a hundred years old. They could run on coal, nuclear, natural gas. It could be perfect units running on chicken litter and God knows what else.

We have no interest in any of that. We are resource technology-fuel-size-age neutral, subject to reliability, which, as Brian said, is really our key focus. So as we come into this looking at the CO2 rule that's been proposed again, much like MISO, we don't have a position on the wisdom of the rule. We are not environmental experts. We are not environmental legislators, but our job is to operate the system reliably, number one, and, number two, to make sure that the market outcomes are as cost efficient and least cost as humanly possible.

So hearing comments from the AG's office, I just want to send a big old fruit basket, and I can't send it literally, but figuratively,, to the AG's office, you know, for embracing market mechanisms, because I think what RTOs show -- RTOs
through their scope and scale, because we are aggregating all the old utilities up together and operating them effectively as one, we are exploring the economy of geographic scope and just large scale to bring lower cost outcomes in just day-to-day dispatch, daily commitment of units, transmission planning, and resource adequacy, and that regional solution in PJM at least brings what we estimate to be about $2.2 billion in savings each year.

That equates to giving the number of gigawatt hours that flow through our market more or less $3 megawatt hours, or just under 10 percent of the wholesale price, energy price. That doesn't include all other stuff, but it's not an insignificant amount of money.

If you would translate that to a household, all that would pass through. Say they consume a thousand megawatts a month, $3 times 12, that's $36. Hey, that's not too bad.

So we have all these economies of scope, you know, and regional solution also cover up a multitude of reliability sins that may exist if
you were operating all of these utilities separately.

So you think about operating just ComEd alone versus operating our neighbors in East Kentucky Power Cooperative, American Electric Power and their operating company separately, individually it could cost them more to insure resource adequacy or transmission reliability than acting in aggregate. There are gains from trade to be had because some systems are long on resources. Some are short on resources and everybody benefits.

Those who are short get lower cost resources, because they can buy them in the marketplace. Those systems that are long can sell resources, and if they are in a regulated environment, they can rebate that back to their customers. Either way everybody benefits from that regional cooperation.

I think with respect to that then if we are thinking about regional solutions, it only makes sense to think about regional solutions and the environmental problems we face.
If we look at it historically, the sulfur dioxide program was a broad regional program. The Knox Budget Program, the Clean Air Interstate Board were all broad regional programs, and, in fact, exceeded the regional scope of any dispatch entity at the time, whether it be MISO or PJM, and those are seen as success stories.

And, again, I'm going to throw kudos out to the Attorney General's office for recognizing the success of those programs in the past, but we are concerned about reliability, and we have had programs in the past, such as Mercury Toxic Sequence, and the RTO, MSO, PJM, New York, Guidison, Waveland, Texas, California, got together got a bunch of units that needed to retire from their compliance obligations, but we don't have sufficient time to get reliability solution transmission in place. We need a methodology by which we can extend those units so that we can actually allow them to comply with the rule in a reliable fashion.

EPA heard us. We got it into the final rule. It's an insurance policy. It doesn't
mean that units are going to be running out of compliance for years and years and years, and, in fact, I know of no units that have applied for a fifth year beyond the original fourth year that was already envisioned in the Clean Air Act Amendment.

So I think that's a victory up for reliability, but it's also a victory for the way the EPA implement that particular rule, but from a reliability standpoint, we are also arguing it's time for reliability safety, and PJM has been working with MISO and other RTOs to get something similar in place, but the proposed rule here is a little bit different.

So some of the reliability issues that we face in mass we don't necessarily face here because there's not a cliff, per se, where everybody must conform. It's not an emission rate like mass where whether you run one error or 8760, you have to meet the standard. There's a lot more flexibility and wiggle room at least in theory with this.

So really one big concern we have at PJM is what happens in terms of state-by-state
components and how does that affect now daily commitment in dispatch of units, because we have heard some of the states in our footprint, and I'm sure will come up, if it wasn't going to come up already, is some states say no way, no how are we going to put a price on emissions, never going to happen. That's fine. States could choose to do that. The state implementing authority, the state EPA's have the right to actually run time limit on fossil units. That's great. They can do that, but how does that -- but what does that do for us as a system operator.

I had no price by which to dispatch that unit on. How do I price that one-time restriction in unless I have things in place. All the other programs that I mentioned, the SOT training program, the Knox Budget rule, had a price on emissions.

All of our markets, all the RTO markets incorporate those automatically as if it were a fuel cost. We can dispatch units based on a combination of fuel costs and environmental
attributes to still get that least cost dispatch.

Certain implementation regimes, quite frankly, would make that very difficult for us to do.

So with that, I will conclude my comments there and open up to questions, and, again, thank you for the invitation to talk to you today.

CHAIRMAN SCOTT: Thank you. Let me just start with you and then with Paul.

So the issue there would be, if I understand you right, a bunch of states are going it alone and eight different states in your footprint or in yours, Brian, have decided that they're going to comply with the rule by just limiting the amount of hours that coal-fired generation could run and for you then that creates an operational nightmare of how to be able to dispatch enough power at the times that you need it.

Is that a fair way to summarize that?

DR. SOTKIEWICZ: That's a fair way to summarize it, and then the question is if we dispatch those units and then run out of hours, then what do I do?

Oops.
We actually have to have a way to allocate that, and all it would really take is one state to do that. So we have 13 jurisdictions, plus the District of Columbia. There are really only 12 that are affected by the rule. The District of Columbia is not included in the rule, and we have generation resources in the State of Tennessee. So really we are looking at 12 different jurisdictions.

Let's say a large jurisdiction -- I won't name any states to protect the innocent and the guilty here -- just decides to run time restriction on units. That could potentially affect hundreds of units that we are dealing with. How do we manage that?

Now we do have voluntary ways to manage that within tariffs approved by FERC, but that doesn't mean they have to do that. We would actually have to go to FERC and ask for a change to actually require such a methodology be used by any unit that is time restricted, whether it's more time restricted for Section 111(d) greenhouse gas.
compliance or simply as a part of their Title 5 air permit for nitrogen oxide emissions or carbon monoxide emissions, as many CTs are across the county. It can create a price for us to help dispatch those units, but, again, it creates a very unit-specific price for emissions as opposed to something that's much more transferable than what we've heard in the earlier discussions.

MR. RYBARIK: I was just going to add on top of that when I look at MISO's footprint, we have 15 states, 17 jurisdictions. The City of New Orleans is a separate jurisdiction, and we also have Manitoba, but the other complicating factors there is if all of our states go alone, I think of how that sort of intersects with policies we already have where we have RPS policies in almost all of our states and wind located in certain parts of our footprint that is then transmitted to other parts of our footprint.

If you have state-by-state restriction on when you can run to fossil generation now and you have wind coming through in one place, right now we
are able to maximize the value of all this by looking at that broad geographic footprint. If for certain units we have to sort of isolate them, I think we really lose the big value that we brought in incorporating all of these RPS policies, then you start wondering, well, are those RPS policies going to be possible any more to meet with the wind generation we put on the system. So it creates a big morass if you start looking at it from an individual state-by-state basis.

Is it possible? I think we could probably figure out someways to do that. It's just not going to be optimal.

DR. SOTKIEWICZ: If I could go ahead and add to that.

CHAIRMAN SCOTT: Go ahead.

DR. SOTKIEWICZ: We are not trying to force regional compliance on anybody. The states actually have the power to do as they wish under the Clean Air Act as part of the Cooperative Federal Agency. Every state could do something slightly different, but there are varying shades of white to black and
gray in the middle on how that can be done and how
those are going to affect dispatch operations.

In the most ideal of worlds it might
look something like this in your training program
where everybody faces the same price for emissions, sulfur dioxide, Knox Budget Program. Going further
down, you may have smaller regions that break off
and have a common price while the rest of the states
each have their own individual price.

Can we still dispatch the system?

Absolutely, we can. Can we manage reliability?
Absolutely, we can. Will it cost more? Yes, it
will cost more, because it will no longer be as
cost-effective. Will it result in things that we
hadn't expected before? Quite possible it could
change dispatch on the system. It may bring to our
attention NERC reliability criteria violations that
would require new transmission build-outs.

So can we manage this? Yes, but it's
also going to be potentially much more expensive all
the way down to simply to not putting a price on
emissions and just having these one-time
restrictions would be the other opposite extreme of

And so, you know, to the extent that

there's a concern where states think they cannot

necessarily get together to do a regional program,

we can manage that on a state-by-state basis with

separate state prices. It's just going to erode the

efficiency, as Brian alluded to, the RTOs already

brought.

CHAIRMAN SCOTT: Commissioner McCabe.

COMMISSIONER McCabe: Both RTOs are doing

modeling. Is it safe to say, given both your

arguments in the rulemaking process, this is just

the first round of multiple rounds of modeling?

DR. SOTKIEWICZ: Yes. We are still in the

process of working through a lot of things. We are

actually using a production cost simulation dispatch

mode from Ventex, which is owned by ABD, and not

that I'm endorsing it necessarily, that is just who

our vendor happens to be, and that is a model that

will run from all 8760 hours in a year where we are

running weekly unit commitment on hourly dispatch on
a representation of the transmission system as it exist today.

So, generally speaking, we have actually made some assumptions to try to cut down the computation times. Normal runs take about 24 hours for a one-year run. We have actually cut that down to six, seven, eight hours, because we are not modeling the PJM system with the MISO system attached to it, or with New York ISO to our north, or the Duke system to our south. We are just modeling the PJM in insolation to cut down on computation times so that we can run more scenarios on this.

What we expect to see out of this is we will obviously get an impact on prices. We'll see an impact on revenues from generators. Based on the program, we'll see emissions profile, a price on CO2 emissions, and those types of things. But because of the complexity, and I know EGEAS -- and I'll let Brian address this in a little more detail -- is a system that is less computational and burdensome and shows a different set than Promon
MR. RYBARIK: And for the reasons that Paul just talked about Promon, that's why we initially started with the EGEAS models. We wanted to provide information for people to make comments on the rule and give at least some initial analysis, and, of course, the comment deadline got extended in the middle of our analysis, so that maybe in hindsight wasn't the best option, but it actually does give us some very good information though, but it does have its limitations, and that is it's not really looking at a production cost model. It's looking at just what it actually costs in a transmission-free world to put fuel into the system and expand capacity, so we are getting an actual cost of capacity price, but we are not getting anything that would reflect transmission congestion or transmission upgrades that would be needed to actually fulfill the dispatch that we are seeing or gas pipeline infrastructure.

So that's a long way of answering your question of, yes, this is a very initial take on
this, and there has to be a lot more modeling and,
quite frankly, a lot of that is going to be reserved
until we get a lot more finality in what the rule is
and then we can actually look at the specifics of
that rule, so there's a lot to be done.

CHAIRMAN SCOTT: Let me take you into an area,
because you just hit on it, Paul, when you are
talking about modeling with or without MISO attached
to PJM, and that obviously is a very concern for us
since we are attached to both of you.

So in terms of working together and
how that works out for our particular state, and I
know in REGGIE you are working with two other RTOs,
so you have got those kinds of issues, can you talk
to us just a little bit about that and how that
works.

DR. SOTKIEWICZ: Let me kind of work backwards
from your question, Mr. Chairman. With respect to
REGGIE, right now Maryland and Delaware are a part
of REGGIE. New Jersey once was a part of REGGIE.
Governor Christie withdrew from that cooperative
agreement, and it hasn't caused any problems just
having two state in REGGIE and no other states in
REGGIE. There are prices for the REGGIE states on
generation. It runs just fine. The other states
don't have it. It does affect dispatch slightly,
but the price is high enough to really see major
impacts on dispatch. Excuse me. But, in theory, it
shouldn't have some kind of impact on dispatch.

But in terms of working with the other
RTOs, it's created no other operational issues with
the other RTOs. We already did the same checkouts,
you know, interchange checkouts 20 minutes before
the top of the hour that we do with the other RTOs,
and we have now implemented New York for the
transaction scheduling, so we'll probably start
discussions with MISO very soon with the exchange
optimization.

So, in that sense, you know, what we
are trying to do is get a snapshot of what we are
looking at and, for computational reasons, we have
had to do this, so it's not as if we are
discriminating against MISO.

I could say the same thing about New
York. We have left them off, too, but with respect to Illinois' situation being a part of multiple RTOs, Illinois is certainly not alone, but it's probably the most notable in leading the discussion about regional compliance.

In some sense Illinois stands at a crossroad and actually can be a real policy center, here because in some sense Illinois could choose to go regional compliance in both RTOs.

As I mentioned, this is actually before the rule was initially announced, is that Illinois can simply say, all right, we can do regional compliance with our resources in PJM. They go with PJM. Our resources are with MISO. They go with MISO. You know, by the way, resources internal to Illinois can all trade with one another. All of a sudden Illinois has become the universal translator between programs in both RTOs. It's done very simply in many ways, so it could be Illinois. It could be Kentucky serving the same thing. In fact, Kentucky touches MISO, PJM, not RTO affiliated and TVA (phonetic).
So, again, you could get that kind of cooperation with one state that actually spans multiple RTOs rather than it seems being a big issue operationally as it is with power system operation, it's actually almost become an advantage spanning the regional nature of the compliance program potentially.

CHAIRMAN SCOTT: Brian, did you have a comment from MISO's perspective?

MR. RYBARIK: Yes. I think there's two pieces there. One is the modeling side of it and not dissimilar to what PJM is doing. We model the MISO footprint just because we had to get something done kind of quick and dirty here at this point.

I think ultimately we are going to have to model this together, if not on a whole eastern interconnection basis, we are going to have to look at it that way.

I think that sort of segues myself into Paul's last point, which is the more you can make any market design you have for pricing CO2 or how you are going to make it, the more that is
uniform, the easier it is for everyone regardless of whether you are in multiple RTOs.

We have many states that are similar to Kentucky that have two RTOs. Missouri is the one that came to mind with two RTOs as well as multiple non-RTO areas. The more you look at that and say let's try to make this uniform so that trading take place across different platforms, it makes it significantly easier, and I think then you get down to just sort of normal operation issues, which we have to work on as well, but this shouldn't affect that if you get that sort of signal rate.

CHAIRMAN SCOTT: So operationally it's easier for both of you, and theoretically from a cost perspective it's better as well?

DR. SOTKIEWICZ: In theory, it should lead to lower cost overall, and especially with the initiative that we are going to be undertaking with MISO.

I mean, you know, we were actually the first two RTOs to actually -- really serious is not the right word -- but an extremely detailed joint
operating agreement, and through that joint operating agreement the dispatch staffs from both RTOs worked closely together on a daily basis -- an hourly basis I would say -- to make sure that we were managing flows between the two RTOs, and in doing so in the most efficient, reliable, and cost-effective manner, and the interexchange optimization work that we are going to be starting is going to try to really price that out so that effectively rather than having a MISO price for PJM and a PJM price for MISO, effectively the price will be spot right on top of one another, which would effectively serve from a power system's perspective, but you do have to worry about the laws of physics and all that.

Look like into the environmental rule, the option that I just laid out for a state with multiple RTOs where really that's actually much earlier than what we have to worry about in operations.

MR. RYBARIK: Another thought just came to mind and, you know, maybe to expand even further beyond
the RTOs is that, you know, I was just thinking we have utilities that would really prefer to have a single idea of a market design for the CO2 issue, because they themselves are in multiple RTOs. Another example I am thinking of is Xcel Energy. They are all over to country. So the more you can design a market that doesn't really matter about geography or where you are and that you can trade your CO2 credits or divide CO2 credits wherever you sit in the country, the better off those utilities are as well. I know they don't do business in Illinois, but that I think is a big, big issue for some utilities that are in multiple areas and multiple interconnects.

DR. SOTKIEWICZ: And keep in mind the other thing, too -- and I'm going to throw on my academic hat -- it's not necessary for any particular set of states or groups that want to trade with each other to be a part of the same dispatch. You can still get a lot of those economies, even if you are a different dispatch.

So the Xcel Energy they could trade
with somebody in Minnesota. Well, I have got my
solar in Minnesota. The Xcel part of Minnesota is
in a completely different interconnection, not even
synchronized to invest in an interconnection, but,
yet, they could trade CO2 credits, allowances,
whatever you want to call them, and it wouldn't be
an issue necessarily there.

So, I mean, we're using the RTO
dispatch as an example because it's convenient and
the institutions are already there, but it doesn't
have to abide by those dispatch operations.

CHAIRMAN SCOTT: The last few minutes that we
have got left, so you heard from Franz and Jonas
talking about lots of ways to structure different
programs, and I'm assuming from the answers that you
have given already that almost any of those could be
incorporated into PJM and MISO and operate. There
are differences between them, but just on a broad
question, I'm assuming any of those different plants
could be as well as states going it alone, although
you talked about that option already.

DR. SOTKIEWICZ: Sure. All of that could be
done, and I think if you look at the way the EPA actually modeled the emissions rate standard for the proposed rule, there is actually a price on emissions. So if there's a price on emissions, if it emanates from emission rate standards as opposed to mass-base solution for compliance, it could still be incorporated in the dispatch.

CHAIRMAN SCOTT: I'm assuming rate versus mass for your purposes doesn't matter. It may matter from trading program purposes, but it doesn't or does it matter whether there's a combination of states working together on rate versus mass?

DR. SOTKIEWICZ: From our perspective, that's going to be a choice the state has to make from a system operations standpoint. The more uniformity there is, the most cost effective the dispatch is going to be, but, you know, whether states choose to go with a rate-based state or mass-based standard, it's not really something that we should be concerned with as long as we can get the information we need to dispatch the system.

CHAIRMAN SCOTT: Brian.
MR. RYBARIK: From an RTO operations' perspective, I think that's absolutely right. From the ability to trade those two across those platforms, the more uniformity they are, the better off they are.

The mass-based system seems to be at least easier to me to get my head around from a trading perspective, and that's how we have had to model it. That's another issue that we had to deal with, the EGEAS model. It only looks at mass-based stuff, so we are modeling stuff from looking at it from a mass-based perspective. That's maybe why I could get my head around it.

DR. SOTKIEWICZ: I think the one thing that is interesting when you look at some of the more academic works that are done by organizations such as Resources for the Future that are non-partisan, and they have taken a look comparing an emissions rate trading scheme versus a mass-based trading scheme, and you have different effects on dispatch because of the way the schemes are put forth.

So, for example, if the way they
describe the emissions rate trading scheme, you have a target emissions rate level, everybody earns credits, but effectively if you are below the emissions rate target, you effectively are getting a production subsidy, whereas, if you are above the target, you are actually paying extra for the emissions over and above the emissions rate target; whereas, under a mass-based approach everybody's dispatch cost goes up.

So it's going to have different pricing implications. It's going to have different revenue implications from generators, implementations for how much extra revenue they may need outside of the energy market, things of that nature. Things that we haven't examined or understood, I think are key things for us to flag and think about going forward.

CHAIRMAN SCOTT: Okay. Well, we are just about on time. Anything that we missed that you think we need to know today? Obviously, we have talked a lot.

Is there anything that you think we
DR. SOTKIEWICZ: Regional compliance -- I mean, ultimately the RTOs are examples of what broader regional solutions can do in terms of cost savings. I'll just use another example that is not even here in the Midwest, but that is out in the Pacific Northwest and out in California.

All of a sudden you are starting to notice the rise of these larger balancing authorities incorporated in California ISOs and much of the vertically-integrated utilities in the West that have a lot of hydro and wind resources, and on a stand-alone basis the small utilities have a very tough time balancing systems, while renewables are available, very little thermal generation, but as a group, because they are geographically diverse in scope and also resources in scope can actually better manage a lot of these variations.

So I think to the extent that you look at the EPA building blocks and you look at the state of RTOs already on the books, that regional scope -- Brian brought this up in his initial comments is
exactly right -- that makes a big difference on how
we operate the system. We can absorb a lot more
renewables in the geographic and resource scope than
a small utility could necessarily on a stand-alone
basis.

I was just going to add as a tongue
and cheek, because I hate to stand between people
and a cocktail, that the importance of the topic on
a day like this hearing at the end of the day, it's
probably inversely proportioned some time before
cocktails are being served.

MR. RYBARIK: I planned on a tongue-and-cheek
thing as well. The last thought that I had becomes
something the Commissioner quoted and saying about,
you know, how do we get all these states working
together. I know there are a lot of groups that are
trying to get groups together to try and harness the
value that we have been talking about here today,
and there's a lot going on.

States are just trying to figure out
where they stand with the rule, just trying to
understand the rule, figuring out the situation with
the TROs, trying to write your comments, et cetera, and how do we get people together.

Well, you know what Nietzsche said, "out of chaos comes order," so that's my tongue and cheek.

(Laughter.)

CHAIRMAN SCOTT: Blazing Saddles.

(Laughter.)

Gentlemen, thank you very much. We really appreciate your being here. Thank you to every presenter and for all of you in the audience for being with us, and those in Springfield, and those of you who are listening in. Thank you very much, Mr. Feipel, for putting this together, and this meeting stands adjourned. Thanks to everyone.

(Whereupon, the above matter was adjourned.)