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PRESENTATION BY:

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MR. SHEA:

What I want to share with you are some insights based on the work that I do every day and in the last couple months particularly so at the White House with key staff there that are working on the energy policy development task force, that are working on some of these EPA regulatory programs, and give you some thoughts as to what is going on behind the scenes to supplement maybe what you're reading in the newspapers. I think you'll find it interesting.

Obviously, electricity and economic growth, linked. Almost, you know, right across the board for the last 30 years. We know that. It's a matter of fact of life. Electric drives the economic engine in the U.S. And demand of anything is going up. Jan mentioned that DOE -- and these are rather conservative forecasts in my opinion -- is estimating that we're going to need about 393,000 megawatts over the next 20 years. And that's right, if you think about it, based on what we're using today, approximately 850,000 megawatts for total generation, close to 700,000 just in the utility sector. We're looking at between a 50 and a 60 percent increase in the amount of generation that we're going to need over the next 20 years.

Ladies and gentlemen, that is a lot of juice. And we do not have the ability right now in my industry to produce that. And there are a lot of impediments. California is perhaps the best example, but it's not the only one. I'm actually quite afraid when I'm listening to a number of our CEOs talk, that they know for a fact and there's nothing that they or the administration can do about it, that we're looking at extensive blackouts this summer in California and perhaps other parts of the country. It's very disheartening. And it is going to happen. And the underlying cause is the fact that we do not have sufficient capacity and generation in this country, we do not have sufficient infrastructure to allow for the transmission of power. And we need to have it.

Now, as to fuel choice, obviously, my numbers will burn anything, up to and including dirty socks if it's economic and they can do it. It doesn't matter if it's nuclear, or if it's hydro, or if it's coal or if it's gas. I can tell you emphatically, not just being an old coal guy myself, that we want to burn more coal. We desperately want to burn more coal. We've got over 30 plants that were announced in the last year. Some of those I think are at risk for some of the issues that I'm going to get into.

Coal is cost effective. Working with the Vice President, we're hoping that the market share goes up, we want it to go up as the fuel of choice. There simply isn't the gas out there to provide base-load generating capacity. Not a week goes by where I don't get a call from some of the industrials, the chlorine industry, the copper industry, saying they cannot compete, they cannot buy the electricity, because we're buying it all in the electricity industry or in the utility industry. And that's true.

Now, you've already seen a number of iterations of this, the pie chart on fuel mix. Some call it sort of energy balance, and I call it fuel diversity. That's sort of the term of art that's used within the administration, fuel diversity. Again, I will reiterate what other people said. That is a good thing. The fact that you've got these different types of fuels, particularly in different parts of the country, is incredibly important. And it actually helps coal's case.

Another handout that was over there was a one-page map of the United States depicting sort of the fuel choice by area of the country. That's very important. You obviously have the parts of the country where coal is the predominant source. Others like in the northwest where it's hydro. Take a good look at that. The underlying point there is you can't screw around with the generation mix in certain parts of the country, because it would be disastrous.

Here's what you already know. It's out there. Coal is our friend. We know how to get it. We can do it cheaply. We can bring it to market. Abundant, affordable, reliable, increasingly clean. You'll hear me say that a couple times. You'll hear the administration use those terms quite a bit.

Bottom point here actually applies to many of you in the room. We can bring it to market very effectively through our partners in the rail industry. Increasingly clean. This is a little tough to see, but again you have in your handout -- again, as Jan and other speakers have mentioned, emissions are coming down. They're coming way down.

What actually is not on this particular chart, we can also show that particulate matter emissions are coming way down. And now that we're moving into an area where we're looking at potential air toxics regulations for coal-fired generation, it's interesting to note that just through the application of existing controls on our facilities, whether it's scrubbers for SO₂, low NO_x burners or selective catalytic reduction for NO_x, or precipitators for PM, we're getting about 40 percent of the mercury that's emitted from coal generation right now without doing anything else. Forty percent. The same for some of the other metals that are in the coal content. That actually is a piece of good news with respect to the pending mercury controls that we're looking at in the next few years.

Now, the general outlook. I've got a lot of environmental concerns and I'm going to touch on a couple of the big ones in a second. These are a big, big deal. For those of you that work on sort of the negative side of the equation within your companies, not out there generating product and making sales, but trying to keep as much as possible of that from going away. Like in the environmental area, we work on -- it's not a very glorious side, but we're trying to help. We've got some serious, serious problems. And they haven't gone away, even with the change in administration. Very important point. All right.

Here, in my opinion, are sort of the main points that are coming through, when we have discussions with Andrew Lundquist, who heads the Vice President's energy policy task force at the staff level. Larry Lindsay, who's one of the President's principal economic advisors, Mitch Daniels, who heads the office of management and budget. These are the terms or the phrases that come out over and over and over again. When the energy

policy task force report is issued in mid-May, you're going to see a lot of this in there.

Diversity of fuels, new technology options, appropriate incentives for electricity generation. A lot of interesting things in there. Up and including possible tax relief. Develop and commercialize clean coal technologies and provide funding for coal R&D. I can give you an example of Senator Byrd's bill, the national electricity and environmental technology act, or F-60. These things are going to be in there, guaranteed.

Now, you're also going to see a lot of words devoted to environmental policy. Now, the President's getting some opposition. Certainly among his staff and certainly within our party, the Republican party, about how much environmental stuff should be in this. He has argued, as have a number of his close advisors, that the two are inexorably intertwined. You cannot move forward on a national energy policy without taking into account where we are on environmental policy. It's very clear from his letter to the U.S. Senate on March 13th which is the horse and which is the cart. Energy policy is going to drive the two in his administration, but he is going to include some addressing of environmental policies.

Now, here are the points that you're going to see. Rely on sound science and verifiable health benefits. I love this one. Everyone knows what we went through over the last five or six years on the national ambient air quality standards. We had EPA coming out and saying 100,000 children are at risk, or the elderly, for premature mortality. They're going to die in the streets from the fine particulate matter that's being emitted from coal-fired generation. Well, guess what? Six months later that number had become 75,000, then it was 65,000, then it was 50,000, then it was 35,000, then it was 20,000, and now it's 15,000.

Folks, these are just numbers. These are just numbers. They're scary numbers. They're used provocatively by those, particularly in the public health and environmental communities. They scare people. They've scared my grandmother. She's 97 and said, what is going on? I said, Gram, this is wrong. Plus, it's a premature mortality. If you die a day early, you're a statistic. She said, oh, okay. She didn't really understand, but she sort of got it that I was taking care of it and it wasn't a problem.

Beware of these numbers. Verifiable health benefits. It's very important. Consider fuel costs. There's the link to energy policy. The environmental section is going to have a strong linkage to energy policy. Practical compliance deadlines. If we're going to set hard targets for reductions of different things, give us a reasonable amount of time to do it. Don't stick us with a deadline that's impractical or is effectively technology forcing or will cause fuel switching, because we can't meet it in an appropriate amount of time. That will not happen over the next few years.

Reasonable certainty for investments. Do not tell me to do something today where I have to and plug in this widget or bolt on this piece of equipment and two years later it's effectively a stranded environmental requirements with a couple of new ones. Don't do that to me. Give me some certitude for investments along with those reasonable compliance schedules.

Give states appropriate flexibility. This is a big one. You've got a governor, you've got a

lot of folks in the administration with state background. My opinion over the last eight years we've seen a serious erosion in the so-called federal-state partnership. A lot of these rules and regulations, whether they're health or environment, the big ones that you have to deal with every day are supposed to be implemented by the states. Sometimes without any money, and we call that an unfunded mandate. But in any event, there's supposed to be a balancing of power there. That hasn't occurred. There has been a steady erosion. We've got Big Brother basically telling the states what to do on most of these environmental issues. That's got to change. And it will change.

Now, specific policies initiatives. Here are the big daddies, in my opinion. These are the issues, maybe there's 20 or 30, crossing the water area, the solid waste area, the air area and, of course, climate change that we all work on on any given day. These are the big ones. These are the coal killers. These are the ones that we need relief on and I'm actually fairly optimistic about.

New source review. You can't help but have heard about this one, because basically we've had a reinterpretation of this entire program that EPA administers that does not allow our plants to conduct routine maintenance and repair. Now yeah, they're going to run the risk of violating the law and looking at penalties and possibly jail time for CEOs because they're not going to cut off the power to the elderly citizens in Chicago in the middle of July or August. That's not going to happen. But this particular rule is the largest impediment to making changes, basic changes at plants. It's an impediment to environmental progress. It's an impediment to safety, worker safety. And ironically, the fact that it doesn't allow us to make efficiency improvements at our plants, ironically, it also doesn't allow us to do projects that could be a CO2 beneficial.

I will point outside that this change started occurring in '96, and then in earnest in 1998 when EPA tried to do away with the so-called wet pro rule, which allows us some safety on new source review. I was at EPA for four years. I worked in the enforcement program. I was the chief of staff to the then-assistant administrator Jim Straff, who then went to California. I was very zealous at my job. We both had cots at our office. You can call that insane. We worked very hard. We used every enforcement tool in the tool kit available to us. So did our colleagues at Justice.

Nowhere, nowhere in the deepest recesses of our gray matter did it ever occur to us that we could so warp the new source review program to do what was done in roughly 1998. This is going to change in the next few months. I guarantee it.

Mercury. All right. Also on a substantive matter, we've talked about Kyoto a lot. That's been out there. It's the big boogie man in the last few years. Kyoto is dead. Kyoto is absolutely dead. It's not going to happen. We're taking steps right now to reverse every piece of paper that EPA has put together where they could call CO2 a pollutant under the Clean Air Act. That's going to be nailed down in the next few months.

Internationally, the U.S. is not going to work on Kyoto. It is dead. For those of you, not you specifically, but for those who want to continue to beat that dead horse, let me tell you right now, there will be no equine resurrection here. Now, having said that, mercury, in my opinion, is very Kyoto-like in its potential impacts. Mercury to me is the issue that scares me the most of the ones that are out there right now.

EPA had a regulatory determination in December of last year, another 11th hour initiative, where they basically determined, as they were supposed to, whether there would or would not be a mercury rule making over the next few years. And there will be. Could have been two paragraphs long. Instead, EPA went ahead of the multi-year process that will result in a program, basically prescribed the regulatory approach that we're going to have to comply with several years down the road. They did that now, before we've gone through rule making, public review and comment, before EPA builds a technical record. They did it now.

Coincidentally, by virtue of having selected that particular approach, maximum achievable control technology, they also triggered another part of Title 3 of the Clean Air Act that means that any new or reconstructed coal-fired unit must go through what is called case-by-case MACT review for mercury, and possibly other air toxics.

The punch line of that, the four to five sometimes six years that you normally count on for permitting, procuring materials and then constructing a new coal-fired unit, start at adding a year, maybe 18 months, maybe more. Of those 30 new coal-fired plants that were announced, a lot of them will never be built because my CEOs will figure out that it's not cost effective. They'll look for a way to do something else even though they don't want to. And it's because of mercury. Mercury is the killer.

Harmonize conflicting compliance deadlines for implementation of the NOx rules. Not that big of a deal out west, you say. It's mostly a battle of the states, Midwest versus the Northeast. It all comes down to, well, we're going to do the NOx reductions, but what time frame? And we're going to fix this one in the next few months, as well, we're going to get the more reasonable time frame. Why should it be a big deal for you? I'll tell you why. Because the logical next step for NOx related programs nationally will be to take what is roughly now the Mississippi River border where these new controls are applying east, those are going to move west. That's going to happen. There is going to be a truing up of national NOx reduction programs probably within the next couple of years on this President's watch.

Provide states with greater flexibility on regional haze. I think most everyone in this room is probably an expert on this issue. Terry Ross and others have worked on this very, very hard. It will be with us for a while. You know that a regional haze program, which is intended alleviate basically secondary impacts, visibility, can actually be more onerous than the particulate matter national ambient air quality standard. Finally, support programs for voluntary reductions of greenhouse gas emissions and technology solutions. Another very important footnote. Listen to this very carefully. Now, in the March 13th letter to the Senate, the President made it very clear that he didn't support Kyoto, and if you read between the lines, we're going to be unraveling everything that Kyoto was based on. That's going to happen.

But the President did two other things once we sort of came off of our cloud of euphoria. He committed to some kind of CO2 program, a voluntary program. Think about that. Some day we're going to have to figure out what that means. He also talked about a multi-pollutant strategy for further SO2 and NOx reductions beyond what are required right now, as well mercury. He made that commitment.

In two successive cabinet meetings following the issuance of that letter, he told his

cabinet, you will do this. He's not backing away from that. We're going to have those reductions. We're going to have a voluntary program.

This is not going to thrill some of you when I say that the utility industry right now is putting together a very comprehensive near-term-reduction CO2 voluntary program. CEOs are working on this right now. I was actually showing a draft to a couple folks here like Greg Schaefer, just to see if I could survive the swing test, which is the right across to the nose.

And what I'll say here is since the mid 1990s, EEI and the utilities have already had a voluntary program in place that has resulted in over 170 million metric tons of carbon being retired. We do it with DOE, not EPA. It's not regulatory, it's voluntary. There's going to be a next generation of this. We're working very closely right now with folks at the White House in putting this program together.

Let me put it to you in political terms. The President needs a fig leaf. He's dismantling Kyoto, but he's out there on a limb. He's told his staff, you will come up with something. They're going to do it. Wouldn't you like to be involved in what they put together? We certainly have made the cut that way.

This gives you another look at some of the things that are coming up, both definites and maybes. In summary, again, fuel diversity. Fuel diversity is the key here which allows us to push a very pro-coal agenda. Coal is affordable, reliable, adequate and increasingly clean.

I'm going to switch gears here. I've talked about the President's commitment to the so-called multi-pollutant approach. It's going to happen. Terry Ross asked the question of Senator Enzi, Are we talking about legislation coming out of Senate Environment Public Works courtesy of Senator Smith from New Hampshire? Maybe, maybe not. I would suggest that certainly within this Congress these next two years and possibly within over the next four years, the chances of getting comprehensive, multi-emission legislation through are probably fairly low. It's not there. It's not there.

Having said that, the President is prepared to do this administratively. Now, it won't be as robust a program because you won't, in effect, be amending the Clean Air Act and all of the other statutes that we're subject to right now, but it will be the next generation of regulatory programs. And the goal here will be to gain a foothold, an irreversible foothold on the next generation of reasonable cost effective SO2 and NOx reduction, plus air toxics that we can all live with and that someone else can't undo.

I've laid out here, basically, the issue. You've already seen the list. I'll show it to you one more time. We've got a lot of things going on right now, whether it's the Clean Air Act of 1970, the amendments in '77 or the '90 amendments. The guys that do the permits for your companies will tell you, it's a pain in the ass. You've got requirements coming over 30 years that are like on top of one another, they're duplicative, some of them lead to a forced result of a different technology or process that just doesn't make sense. But it's an artifact of how we do business.

What if someone were to tell you that you had 15 or 20 years, here is the NOx reduction target we want you to hit in that time frame, here's the SO2 reduction we want you to

hit, and the here's the toxics reduction that we want you to hit. And those reductions are fairly reasonable, but it's one, one number, one time frame, with lots of bennies built in. I will tell you that's very interesting to me, and I tend to be a big disbeliever of this, and still have sort of mixed views.

Goals, provide regulatory certainty and stability. We want that. Continue improving air quality. We want that. Increase compliance, flexibility and reduce costs through market-based approaches. Sounds interesting, tell me more. Maintain coal-fired generation as part of the electricity supply mix. And I'm not talking about maintaining it at 10, 20, 25 percent. I mean where it is or better. And it's possible.

Benefits, talked about that. Single set of reduction requirements, Clean Air Act, lower cost of emission reductions, facilitates building of new plants. Part of the problem that we have right now, this lack of certainty that I keep talking about in terms of what's happening with the environmental controls, not being able to rely anymore on the U.S. Court of Appeals for the District of Columbia or even the Supreme Court to help us out in what are some of the most ridiculous rules on their face to ever occur. We can't rely on that. We need to have some certainty. This is possibly a way to get at that.

Now, the elements, and these, I will tell you, again, working with our CEOs behind closed doors, some of them hate this idea because they'd rather take their chances under a business-as-usual approach, saying, well, we'll get Bush or Atilla the Hun as president for the next five terms, right? Well, maybe not. What happens if we don't? So we've got some guys way out there and some guys who have embraced this. All of them are continuing to work on this.

Types of emission, reduction levels, deadlines, safe harbor. That's the big deal. If you do these things, you're into this program, you get that safe harbor, you're not going to get nicked and dined every two years for additional reductions of different types of pollutants. New source review. We get that fixed. That is non-negotiable. Non-negotiable. It's got to go away.

Here's the list put another way. Comprehensive approach, single SO₂ reduction requirement. Over on the right-hand side are some of the items, past and present and potential, that are out there that could affect SO₂ reduction requirements. Same thing for NO_x. On mercury, same thing here. We've got very -- EPA, if nothing else, is very clever. And I'm a product, obviously, of that sort of way of thinking and they taught me well. And I know how they work and they're smart guys.

What they figured out is that as you have sort of an impediment to maybe doing what you want to do through the front door, through the Clean Air Act, there's plenty of other ways to get at you. They're starting to look at hitting us with mercury controls through the water program. Through the water program. Very interesting.

Internationally, the EPA ramped up its discussions with Canada. The northeastern states, any federal EPA working with Canada, to see what they could do -- they did this with NO_x, as well -- but to see what they could do to have Canada bring pressure on the U.S. government to maybe speed up its mercury rule or to have Canada develop a mercury MACT at like 9 percent removal in the next couple years, again, to put pressure on. Very, very clever. And finally we have Henry Waxman and others on the

hill putting out a bill a day with these just like crazy, not well-thought-out plans. But they've got them in play, they get press, they get people scared, and they get a reaction. I put CO2 in here as a place holder. CO2 is not going to be part of a mandatory anything.

Having said that, it is possible, important point, I will predict that when the President sort of finishes off his multi-pollutant approach or his ideas for an administrative program, he will package the voluntary CO2 program with whatever is mandatory, giving you the so-called four pollutant approach that everyone says he backed off on in terms of his campaign pledge. It's packaging, not substance, but it's a very important point inside the beltway.

NSR, safe harbor, flexibility. All the elements are there.

I want to talk to you about some numbers we ran. Again, putting myself at the top of the list of doubting Thomases, we have been spending hundreds of thousands of dollars over the last few months at EEI and some of our companies engaging some top notch economic consultants, people with no ax to grind in this debate, to start running scenarios for us; different combinations of reductions of SO2 and NOx, mercury, and seeing what that gets us. Different time frames for having to do that. And then comparing that to several scenarios of what EPA would logically be expected to do in that same time frame between now and 2020, including some very conservative ones. We used a lot of EIA's natural gas projections or we had other ones, perhaps even more conservative or more robust. We used those as well.

Now, jump to the punch line. And this is what catches a CEO's attention or your shareholders. Net present value. I can also give you the numbers on sort of an annual basis between now and 2020. Scenario one is roughly 35 percent SO2 and NOx reductions beyond baseline, beyond what's required now, with no additional mercury requirement. We just go with co-benefits, roughly what we're getting from existing controls. Scenario two, we ramped that up a little bit, where I think we're looking at 50/50 and co-benefits. Scenario three, I think, it's 60, 60 and 60 percent for mercury, which I think is pretty realistic based on what the health evidence shows up. And finally the EPA future. These are extraordinary deltas here.

Now, we've got to continue to refine these numbers. I'm going to spend the latter part of this week going over, talking to Jack Gerard. Well, maybe not. Our prayers are with Jack, hopefully he's better. But certainly with his staff and with some of the mining companies to let them go through this and see what they think. Because they have the most at risk. I already told you we don't. The mine industry and rail industry have more at risk. It's important that our partners understand what we're doing and see if they agree on these numbers.

Finally, initial findings. Scenarios one, two and three, less expensive than the EPA future. Ninety percent mercury reduction. That's the number that EPA, the career staff, are looking at right now. They're even looking at 95 percent reduction. They're not equating this at all to public health benefit, they're just focusing on a number -- Henry Waxman uses numbers as well -- as a hard target. That number is Kyoto. That number is Kyoto.

EPA future, reduces coal use, increases gas. Uses more than scenarios one, two and three. We know that. The cost of reducing carbon can vary widely depending on the permit allocation scheme. It's interesting we're finding through some of the scenarios we're running, we can get some carbon co-benefits. Plus when you tack on the voluntary program, we think we can do a pretty good job of having a robust CO2 element to this program that does not hurt coal.

There you have it. Basically, sort of some thoughts of mine on energy policy, a little bit on environmental policy at the 20,000 foot level, and something to think about in terms of what is being debated right now inside the beltway as an alternative to business as usual at EPA. Thank you very much.

MR. LINTON: I'm just going to ask if Jan has any comments on Shea's presentation at this point? Or we'll hold for the questions, any other questions, I guess, from the audience until all four presenters present.

MR. LAITOS: What do you think the chances are within the next two or three years there will be a reauthorization of the Clean Air Act, Clean Water Act or CERCLA?

MR. SHEA: I think the chances are very low. I'll tell you, maybe a little better on Clean Water Act. I think CERCLA, in my opinion, is sort of like coal. It's a fossil. I think CERCLA in its present format is an artifact of a time when there was a good idea but bad implementation. I see that possibly being dismantled.

Clean Water Act, I take back what I said, I do see opportunity for Clean Water Act reauthorization over the next four years. I don't see it for air. I'll tell you why. Very simply that while we now know where we might make surgical fixes to make the Act run better, these are even things that we -- Henry Waxman and I might agree that there's problems with the permitting process in the Clean Air Act that weren't envisioned in 1990 that need to be fixed. The problem is if you want to open the Act up to technical changes or to those streamline fixes, much less a broader reauthorization, people start piling on everything.

Now to the extent that the President is pushing in concert with Senator Smith or others a so-called multi-pollutant bill, that might be a de facto substitute for Clean Air Act reauthorization. But Clean Air Act reauthorization amendments of 2004, right now I don't see it. There's no impetus there, there's no political will and there's too much risk.

MR. LAITOS: One more question. Do you think, based on your experience with what's going on in the energy policy center in Washington, D.C. within the White House or within the executive branch, do you see any interest as there was in the 1970s, the late 1970s, in terms of providing incentives, initiatives or grants for coal gasification or coal liquification efforts?

MR. SHEA: There is some. And that's a fair point. Because I stayed away from a couple points in my presentation that started talking about clean coal technology or future R&D.

The Department of Energy is going to make out fairly well over the next few years. It's no longer going to be the red-headed stepchild cabinet office that it has been in the last

eight years. It's going to be reinvigorated. The fossil office and the policy office are going to be the key conduits to implementing a very important piece of the energy policy task force that's going to be issued, again, in mid-May. That's going to be long-term R&D.

Jan was talking about coal gasification. That is going to continue. Obviously, it's very speculative. We're looking really at ten years plus out. But that's okay. Yes, it is clearly in the mix right now. They are looking at it in addition to other basic clean coal technologies, and even carbon capture and sequestration technologies.

I can't tell you how much of an emphasis proportion or percentage wise there will be, but I do know that there will be staff in fairly significant sums appropriated for that.

MR. LINTON: Thank you.

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