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## Fordham Environmental Law Review Volume 13 Issue 3- Panel II-Clean Air, Energy and New York's NSR Litigation

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#### PANEL II:

# CLEAN AIR, ENERGY AND NEW YORK'S NSR LITIGATION

#### Moderator

#### James Ferreira, Esq.

Deputy Commissioner and General Counsel, New York State Department of Environmental Conservation

#### **Panelists**

#### Rachel Zaffran, Esq.

Assistant Attorney General of New York, Consumer Protection Bureau

#### Scott Turner, Esq.

Attorney, Nixon Peabody

#### **Peter Iwanowicz**

Director of Environmental Health, American Lung Association of New York State, Inc.

#### Joseph Siegel, Esq.

Attorney, United States Environmental Protection Agency, Region 2 Adjunct Professor of Law, Pace Law School, City University of New York Law School

MR. DE ROSE: Our second panel will discuss "Clean Air, Energy, and New York's NSR Litigation."

Jim Ferreira will be our moderator. Mr. Ferreira is the Deputy Commissioner and General Counsel for the New York State Department of Environmental Conservation. He has been an Assistant Commissioner in the Office of Hearings and Mediation Services for the New York State Department of Environmental Conservation. He

has also been Deputy Bureau Chief in the Environmental Protection Bureau of the New York State Attorney General's Office.

Our panelists include:

Peter Iwanowicz, who since 1998 has served as the American Lung Association of New York State's Director of Environmental Health. In this capacity he leads the organization's efforts to secure lasting solutions to the State's air pollution problems. During his career, Mr. Iwanowicz has become one of the New York public interest community's leading advocates for clean air. He has successfully promoted a slate of policies and positions designed to reduce air pollution while increasing economic opportunity.

Our second member is Joseph Siegel. Joseph Siegel is an Attorney with the U.S. Environmental Protection Agency in the New York Regional Office, where he has worked for the past fifteen years. A considerable portion of this work is devoted to permitting, enforcement, and policy under the Clean Air Act's New Source Review/Prevention of Significant Deterioration program. In addition, for the past two years, Mr. Siegel has been teaching the Clean Air Seminar at the Pace University School of Law Environmental Legal Studies Program. Since 1994, he has also been an adjunct professor at CUNY Law School at Queens College where he has taught a variety of environmental law classes.

We also have with us today Rachel Zaffran. Ms. Zaffran is an Assistant Attorney General with the New York Attorney General's Office. She practices environmental law exclusively, with a focus on air-related issues. Ms. Zaffran is on the Office's power plant litigation team which is pursuing New Source Review litigation against facilities in New York and other states.

Last, but definitely not least, we have Scott Turner. Mr. Turned has chaired Nixon Peabody's Environmental Practice Group for fourteen years. He concentrates in environmental law, particularly in matters relating to the permitting and regulation of electric generating facilities. Mr. Turned has worked on behalf of clients in air pollution permit, enforcement, and rulemaking proceedings before EPA and various state agencies with respect to coal-, oil-, and natural gas-fired power plants, cogeneration, and waste-to-energy facilities, and industrial process sources. Mr. Turner also is Senior Editor of the New York Environmental Law [inaudible] Petition.

Thank you.

MR. FERREIRA: Thanks. I am Jim Ferreira, Deputy Commissioner and General Counsel of the New York State Department of Environmental Conservation.

I want to thank Fordham for putting together this panel and this opportunity to discuss a very important issue and very timely.

I thought I would take just a quick minute to tell you a little bit about what is going on in New York and the leadership role that the Governor has taken with respect to reducing emissions from power plants both in the enforcement case context and also in the regulatory context.

About a month ago, the Governor proposed what was called the Acid Rain Initiative, which was designed to reduce the emissions of SO<sub>2</sub> and NOx from power plants. Those regulations are out now and being subject to comment. They are designed to reduce SO<sub>2</sub> emissions by 50 percent below that required by the Clean Air Act. With respect to NOx, what they proposed to do is to annualize the NOx emission requirements. All this would essentially be accomplished through an emissions capping and trade program.

As far as the enforcement initiative of the PSD/NSR program, New York has been a leader. In May of 2000, DEC issued notices of violation to the owners and operators of seven coal-fired power plants throughout the State for modifications dating back to the 1980s. New York was the first state to initiate enforcement actions as part of a national investigation of power plants.

EPA has taken the lead in enforcement actions in the State against owners and operators of three other coal-fired power plants. DEC and EPA have worked very closely together, along with the Attorney General's Office very closely, to resolve such issues as the type of control technology that will be required, the emission rates and reductions that should be achieved, and the penalties that should be imposed.

Most recently, the State took action, in January of 2002. With the Attorney General's Office, the Department sued NRG Energy and its predecessor, Niagara Mohawk, in Federal District Court in the Western District of New York for PSD violations in the C.R. Huntley and Dunkirk power plants in Dunkirk, New York. The two plants, according to statistics and figures compiled by the Department, account for more than 20 percent of the NOx and 38 percent of the SO<sub>2</sub> emissions produced by power plants in New York. This is the first case of its kind in the State. In the first case, the complaint essentially alleges violations of the Federal Clean Air Act NSR/PSD provisions, along with some state law claims.

These cases are being actively negotiated with the parties and with the Department and the AG's Office. Just a quick comment. In the Midwest, New York has also been involved. It has intervened in two cases filed by EPA in Federal Court against power plants in Ohio.

With that sort of brief overview of what is happening in New York, let me turn it over to Joe Siegel to give you an overview of the whole program and the enforcement initiative generally.

Joe?

MR. SIEGEL: Thanks, Jim.

I also want to thank the Fordham Environmental Law Journal for putting this panel together and asking me to speak. I cannot tell you how delighted I am to be here, as opposed to the last time I spoke about this topic, which was at the ABA Annual Meeting at which I was the only representative on the panel who was not an attorney for the power plant industry and virtually everyone in the audience also were defense attorneys for the power plant industry. So this is a nice, refreshing change.

Jim mentioned the litigation. Just to give you an idea of how contentious this litigation has been, and it has been fought very hard on all sides, my speech from that presentation and one before that were subject to document production in some of the cases. So I will state for the record right now the remarks I make today do not necessarily reflect the views of the Environmental Protection Agency.

That said, let me try to give you a little overview of the issue. This is a very important issue for New York State, but it is also a very important issue on the national level. I would like to frame these a little more broadly.

The issue of power plant pollution is one that really is being dealt with at all three branches of government.

In the judiciary, obviously there is the litigation that I am going to talk about in a little bit, but there is litigation to determine what is the appropriate way to interpret the Clean Air Act and the existing regulations promulgated under the Clean Air Act.

On the legislative level, there is legislation pending in Congress that might have an impact on the outcome of the litigation, and there are proposals from the Administration will probably eventually play out in Congress in terms of legislation that will address power plant pollution.

Thirdly, the Executive Branch. The Bush Administration is now considering methods to reform the existing regulations.

So the issues are being dealt with in all branches of the government on the federal level.

The best place to begin a discussion of this is with the litigation because I think that crystallizes the issue.

The biggest piece of the puzzle here in terms of litigation is sections of the Clean Air Act that are called PSD/New Source Review. New Source Review is the program that applies to big sources in the areas that are not attaining the Clean Air standards. PSD, or Prevention of Significant Deterioration, is the program under the Clean Air Act that applies to these big sources, probably the major sources, that are located in areas that do achieve the standard. But, by and large, there has been a lot of similarities in terms of the programs and the Clean Air-complying ones and the ones that have not met the standards, so therefore I will be just talking about them together.

Very generally, what these sections of the Clean Air Act require is that these large, major sources must obtain permits when they undergo a major change. The permits automatically apply to new major sources, greenfield sources, but the issue in litigation applies particularly to those sources that are all existing sources and they have undergone some sort of a change, a physical operational change. The issue really is what is the change and whether it triggers as review under the Act, which would require them not only to get permits but to install up-to-date pollution control devices.

EPA and the states issue permits to these sources when they have to come in and get these permits. If they do not obtain the permit and put on pollution control devices, Section 113 of the Clean Air Act provides for enforcement by the Federal Government against violators.

There are many different categories of sources covered by these requirements, not just the power sector, and many, many permits have been issued over the roughly twenty years since the inception of this program.

Let me give you just a brief background on EPA's enforcement initiative. It began in November of 1989 when Carol Browner announced that EPA and the Department of Justice had commenced actions targeting thirty-two coal-fired power plants in ten states, from Florida to Ohio. EPA has since expanded its initiative to the Northeast states and farther out west.

Now, I want to be clear that New Source Review violations in other industries have been pursued by EPA, including the oil refinery industry as well as the paper and pulp industry.

Now, why is all this important? I think Kit Kennedy said it earlier. The coal-fired power plant industry — and I am speaking speaking specifically about the coal-fired, not the whole power sector — emits

approximately a quarter of all the nitrogen oxide pollution in the country and roughly two-thirds of all the sulfur dioxide. So they emit significant amounts of pollution.

The idea was that Congress had grandfathered old sources from complying with these new technology standards as long as they had not undergone any changes. The way the law works is that — in theory at least, the way the law is supposed to work — whenever an old source that was grandfathered underwent some significant changes that would actually increase their life expectancy, and therefore they would not be replaced by some new cleaner power plant or technology, they would have to then come within the regulations, the Clean Air Act requirements that provide for permits and control technology.

How did we get to the issues that are critical in these cases? Well, as I mentioned before, what is important in these cases is whether there has been some sort of a modification of the plant.

What is a modification? The New Source Review and PSD rules apply only where there has been a modification at one of these old grandfathered sources. To determine what a modification is you have to look at what the modification is not.

The definition of what a modification is includes anything that is a physical or operational change. But the Regulations only say what is not a physical operational or change; the Regulations do not say what is a physical or operational change. But the Regulations, as I said, provide for exemptions.

One of the exemptions that it provides for is something called a routine maintenance repair and replacement exemption, the idea being that if there is some ongoing maintenance at the facility or some minor change, then that should not trigger these New Source Review requirements and thereby require the source to put all these expensive controls in and go through the permitting process.

Now, what is "routine" then? If the exemption is routine maintenance and repair, what does that mean? Well, there is no definition in the EPA Regulations, but EPA has historically interpreted this exemption in a very narrow manner and looked at the language "operational or physical change" in a very broad manner.

So this is really at the center of the litigation, and I will get to that in a minute.

But one good way to crystallize it is that in 1988 they issued a memorandum saying that in determining what is routine at these sources, EPA is going to look at "the nature, extent, purpose, frequency, and cost of these changes," to make some comments in its

decision as to whether the change is routine or not. Remember, if it is routine, a routine maintenance kind of thing, then the source does not have to go through the New Source Review permitting requirements.

The Environmental Appeals Board has issued the only substantive decision on this issue. In a 164-page opinion issued on September 15, 2000, the Environmental Appeals Board, which is an independent decision-making body within the EPA, determined that the Tennessee Valley Authority had undergone physical and operational changes that were not routine at their facilities and, therefore, had to get these permits. What they said was they rejected TVA's claim that in order to determine what is routine you should look at what is going on with the industry. What happens in the coal-fired power plant industry is that many of them have made the changes, and so the TVA argued that if everyone is doing it, then that is considered routine.

Well, the Environmental Appeals Board rejected that and applied this four-factor test, looking at the nature and extent, the purpose, frequency, and cost. They looked at things like the fact that TVA was replacing major components of the boilers, that the projects took a long time to plan; that the facility was shut down sometimes for several months, as opposed to a few weeks, which is the normal maintenance outage. TVA had indicated the purpose of these modifications was to increase the life expectancy of the useful life of the plant.

The cost ranged from \$2 million to \$57 million for these projects. So, we are not talking about simple repairs here.

Again, that is the only case that has been decided on the substantive matters. There is a lot of litigation in many of the federal courts. One of them is the TVA case, because after the Environmental Appeals Board issued its decision, TVA swiftly challenged that by filing a petition in the Eleventh Circuit.

The Eleventh Circuit bifurcated its decision and decided to look at jurisdictional issues first. That was decided on January 8<sup>th</sup> of this year. EPA had alleged that TVA, being a sister agency, could not bring an action on its own, it did not have any litigating authority, and there was no justiciable case of controversy because they were all part of the same government.

The court rejected all of EPA's jurisdictional arguments and determined that it would go forth on the merits. The oral argument on the merits is scheduled for May 21<sup>st</sup> of this year. So the potential is — we do not know how long we will have to wait for a decision —

but the potential to get a substantive decision out of a federal court on this issue is there pretty soon. We could see something several months after that.

The first trial is set for another case, the Stuppico [phonetic] case. It is set for mid-October on this issue.

There have been a couple of settlements. There have been a lot of settlement discussions with companies that are subject to litigation, as well as others where complaints were not filed.

One settlement occurred early on with Tampa Electric Company. Another settlement, which I was involved in, was just lodged in the District of New Jersey in mid-February.

That brings me to starting to move into the Executive Branch part of this. That is the ninety-day review. When the Bush Administration came into office, it determined that it would review the position that the government has been taking on these cases. In May of 2001, they announced that two things would happen: the Department of Justice (DOJ) would embark on a review of the litigation position; and EPA would do another review to determine the impacts of these New Source Review Regulations on the power sector and on the environment.

Well, the reviews were due to be completed by last August. It got delayed until October, then got delayed further. Finally, in January DOJ part of the review came out. Indeed, the DOJ determined that EPA's position was consistent with the Clean Air Act and reasonable.

EPA's review, which is more the concept of how the New Source Review requirements affect the power sector and the environment, has not come out yet.

Now, the Executive Branch activities. There have been discussions about reforming these New Source Review requirements for nearly a decade. There were proposals during the Clinton Administration in 1996 and in 1998. None of them were finalized.

With the renewed vigor in the Bush Administration, and just recently Greenwire reported that Christine Todd Whitman indicated that there would be a pair of rule-makings in the near future — well, not in the near future. One would be in the near future, and that would finalize the 1996 proposal. There has been some criticism of that, arguing that we have no data, no information about technologies, impacts on the environment, and that we should no be issuing a final rule-making for the proposed rules, and we will see how that plays out.

The second rule-making would be in a few years, and that would be on controversial issues like routine maintenance and repair.

Moving on to what is going on on the legislative front, President Bush unveiled his Clear Skies initiative last month, which essentially is a cap-and-trade program. What this would do is replace the existing programs, like the PSD/New Source Review program, with something called the NOx Program, a program to regulate NOx in a regional manner, mercury emissions being regulated through the Clean Air Act hazardous air pollutant program. All of that would be replaced by this cap-and-trade program that would cut sulfur dioxide and nitrogen oxide and mercury.

The other thing that is going on, on that front is Senator Jeffords has introduced a bill, which is supposed to be marked up in April, and that bill provides for a more aggressive timetable and a cap-and-trade program option, but not a requirement. The significant difference, I think, is that it does not replace existing programs. That is called the Cleanup Power Act. It requires certain reductions by the year 2007, whereas the Bush plan runs from 2008 to 2018, roughly, being phased in.

The other very significant difference is that the Jeffords bill provides for a reduction of carbon dioxide as well. As I think someone mentioned earlier, the power sector contributes roughly 30-to-40 percent of our greenhouse gas emissions that come from this country, and we are the largest emitter of greenhouse gases in the world. So there are some significant differences there.

I think that gives you an overall viewpoint of what is going on in the different branches of government in the national scene, and that will help you to sort of tie into what some of the other speakers will be talking about.

Thank you.

MR. FERREIRA: Thanks, Joe.

Next is Rachel Zaffran, who is with the Attorney General's Office, Environmental Protection Bureau in New York City, to give us a little bit of the State perspective on what is happening with the issue. Rachel is also a former colleague.

MS. ZAFFRAN: Thank you.

I would also like to thank Fordham for hosting this seminar, and also to all the participants, because my experience has been that any seminar is only as good as the people who participate in it.

What I will be discussing is New York's New Source Review initiative. Currently, New York State has active litigation against sixteen coal-fired power plants for violation of the Clean Air Act. Al-

though our keynote speaker has said that there is not a lot that New York can do with respect to out-of-state plants, we have actually sued several plants in the Ohio River Valley for violations of the Clean Air Act.

First, I am going to explain the environmental problems that really promoted this type of investigation and litigation, then I am going to discuss briefly a little bit about the litigation.

Why did we target power plants? Well, as has already been discussed, power plants emit approximately 60 percent of the national SO<sub>2</sub> emissions and almost a quarter of the national NOx emissions. These air pollution emissions are associated with a whole host of environmental problems. I think one of the more well-known and well-recognized problems is acid rain, which is a very significant and serious problem in New York State.

As this map depicts, this shows the pH deposition around the country, the neutral colors being neutral pH, green being the higher pH, and then the more orangey colors being lower pH's. New York is in the right-hand corner. What that map is depicting is that the acid deposition in New York is among the lowest pH's in the country, with pH's ranging from 4.3 to 4.5. Now, this type of deposition creates a lot of problems not just with streams and lakes, but also with forests in New York, specifically in the Adirondacks and the Catskills.

What this shows is the effect of acidity and pH on organisms that you find in streams, lakes, and things like that. You can see that at a pH of 6, you are going to start getting adverse effect on organisms. You can see that at between 5 and 6, what that shows is that rainbow trout are going to begin to die; and that as the pH gets lower and lower, you have other organisms that are dying.

And pH also has an adverse effect on the diversity of fish species that you are going to find I lakes and streams. Again, what this is depicting is the lower the pH, the less diverse fish species that you are going to have.

Acid rain also adversely affects trees. What happens is that acid rain (I am going to state, just basically and simply), it interacts with nutrients in the soil causing the nutrients to leach out of the soil, and therefore it is nutrient-deficient soil, and you end up getting trees that look like this. That is what you see in some parts of the Adirondacks and the Catskill mountains.

Another problem with NOx emissions is ozone. There are a whole host of health problems associated with ozone. I think someone else on the panel is going to discuss this a little more in detail.

What this is showing is the levels of ozone that are considered dangerous under the most-recent EPA standards. What you can see here is that 0.04 parts per million ozone is considered unhealthy.

This is a depiction of the maximum concentrations of ozone in 2000. What this really shows is, first of all, when you start looking in the New York City Metropolitan Area, how much higher the ozone levels are than what would be considered safe. But also, what you see in other areas of the state is that the ozone issues in New York are really statewide, with the most serious problem being in the New York Metropolitan Area.

Now, in addition to these types of problems, another significant health problem associated with NOx and  $SO_2$  emissions are particulate matter. These emissions come out as very, very fine particles. And again, these fine particles have been associated with a host of health issues — respiratory, heart attack, things like that. I think someone else on the panel is going to discuss this further.

Now, in addition to knowing that these pollutants are causing significant problems in the environment and for public health in New York, we also know that pollution does not recognize political boundaries. What that means is that pollution from other states comes into New York on the prevailing winds. Because New York is so far east, we get pollution from other states.

EPA has already concluded that almost half of the emissions that cause New York City's ozone non-attainment problems are from sources outside New York State, outside the Metropolitan Area. EPA has also specifically identified specific power plants located in Ohio, Michigan, Indiana, Virginia, and West Virginia that contribute significantly to ozone non-attainment in New York State.

In addition to that, the New York State DEC has estimated that only 17-to-20 percent of the emissions causing acid rain in New York are emitted by sources in New York.

So we see the problem and we see that the problem, part of it, is certainly caused by out-of-state sources. And so the New York Attorney General's Office started an investigation in the spring of 1999. We investigated coal-fired power plants both in-state and out-of-state. We targeted facilities based on several criteria: first, the facilities that had extremely high emissions of SO<sub>2</sub> and NOx; and also facilities that were contributing to New York's air quality problems.

Now, in reviewing and conducting our investigation, we relied upon the Clean Air Act and we looked at the elements that we needed to prove. So we looked, first of all, at major emitting facilities. And then we were looking for physical changes or changes in the method of operation that resulted in a net emission increase.

We conducted our investigation basically by reviewing a lot of publicly available documents that utilities had submitted to various governmental agencies — state, federal, local governmental agencies. As a result of that investigation, we did find violations of the Clean Air Act by sources both in-state and out-of-state.

The other thing that we also did is that, as has already been indicated, probably the most common defense in these type of cases is what is called the routine modification or routine defense. So New York then in conducting their investigation looked at the elements that EPA identified in 1988 as relevant to determining whether a modification is so small that it really does not trigger New Source Review Requirements. So we looked at the nature of the work, the purpose of the project, frequency of the project, and then the cost of the problem, as well as the other elements, to kind to screen out those modifications that would not fall within the definition of routine and therefore would not be a violation of the Clean Air Act.

Once New York completed their investigation, New York proceeded under the Clean Air Act's citizen suit provision. If you look there, under A(3), that empowers any person to enforce against any other person who has constructed or modified their facility without getting the requisite permit and complying with the requisite requirements of the PSD and New Source Review requirements. The Clean Air Act also expressly provides that a state is a person for purposes of the citizen suit provision.

So what New York did was that in September of 1999 New York initiated the litigation by filing notices of intent to sue against seventeen power plants located in the Ohio River Valley. This litigation is currently ongoing.

Just to give you a broad example of some of the things involved in the litigation, what we were targeting, was really significant major changes made at coal-fired plants. So when you look at the cases, most of these modifications cost millions of collars. We had one modification that cost \$25 million, and this was in terms of a modification that occurred in the early-1980s. So, given inflation, that is a pretty large modification to be taking place. That is a pretty large project, I think, in any power plant.

In addition, just to give an example of the size of the emissions and the amount of emissions that we are talking about in New York's power plant cases. The thirty-one New York power plants that are subject to the acid rain program emitted approximately 92,000 tons of NOx in 1988. The seven plants that are involved in one of the cases, which New York is litigating, emitted more than three times that in 1988. That is only seven plants emitting three times more than what the entire State of New York emits with respect to NOx emissions.

Then again, the same thirty-one New York plants emitted approximately 210,000 tons of  $SO_2$  in 1988. When you look at those same seven plants, they emitted almost double the amount of  $SO_2$  emissions in 1988, or more than double the amount of  $SO_2$  emissions in 1988.

These cases are currently in litigation. They are in various stages of litigation. We have not had any trials yet and we have not had any settlements, I believe, yet in any of the cases. So we are pursuing the cases and we are going to continue to pursue these cases.

Basically in these cases New York is asking for compliance with the Clean Air Act. What this means is we are asking that these power plants be required to put on pollution controls that reflect the best available control technology or the [lowest] achievable emission rate, depending on what regulations apply. If — or I should say when — that relief is granted, the emissions from these plants could be reduced between 80 and 90 percent. That would clearly go a long way towards improving air quality in New York.

Thank you.

MR. FERREIRA: Just a quick comment. The use of the Clean Air Act citizen suit provision and using the term "person" as defined in the Clean Air Act, the State was considered a person. It was one of the first times, I think in the country, that for these types of cases that, that provision of the citizen suit was relied on by the State. So the state is a person and a number of court decisions affirmed that. That was the first time that concept had been used here in the U.S.

Next to speak is Peter Iwanowicz. Peter is Director of Environmental Health for the American Lung Association.

MR. IWANOWICZ: Thanks, Jim.

In my presentation today I am going to look at bringing some of the issues down really to the human health level and home. I promised my wife when I make this presentation — she says, "Don't do the gloom and doom stuff." I say, "Honey, that's kind of the job." So I always try to spice up the slides with a couple of photographs to keep it more optimistic.

I really want to present this overview of the public health implications of moving forward and enforcing New Source Review. The tremendous opportunity that lies before us in enforcing the Clean Air Act — not that it should be the only goal of New Source Review, but a tremendous outcome of enforcing New Source Review is public health protections. I will examine some of the cases in a graphic form in my presentation, and I will try to boil down for you what is at stake here in New York and in many other states, especially the Ohio Valley.

The reason why we are going after some of these power plants from the New York perspective, in terms of the Ohio Valley, is to do something positive about acid rain in the state, but one of the biggest beneficiaries of those plants complying with New Source Review are the people living close by. The emissions of those plants are always going to have health impacts the closer you are to the stack. So it is somewhat ironic that New York is actually trying to do something very positive for acid rain, but in the process we are going to actually benefit the public health of the citizens of the Ohio Valley.

We have had a great primer on New Source Review and all that stuff, so I will not touch on that.

As Rachel alluded to, I am the person who is going to get into the health impacts.

Of course, the "Four Horsemen" of air pollution. We have heard a lot about that. For those of you are looking at these federal debates, we have had a four-pollutant approach, or what we call 4P; we have a three pollutant approach, 3P; and then we have a two-pollutant approach, 2P.

We have a two-pollutant approach moving forward in New York under the Governor's acid rain initiatives that address the first two, nitrogen oxide and sulfur dioxide. We have a great summertime program for NOx (The Lung Association has been happy to support the negotiations, some three years ago now) and the sulfur dioxide levels that were announced earlier were a 50 percent cut beyond Phase II. We will get into some of the health reasons why we think that cut should be deeper.

On the federal level, we have added to the mix a third pollutant. Mercury is going to be addressed by virtue of some lawsuits by the environmental community. NRDC is really spearheading that. We are going to get maximum achievable control technology in terms of mercury coming into play at some point.

And the all-important fourth P, in terms of greenhouse gas issues, is carbon dioxide, missing from the President's approach and not yet addressed by the Governor.

I will get into some of the health impacts of these in a little bit.

[Slide] A picture is worth a thousand words. We have talked about grandfathered plants under the Clean Air Act, loosely termed grandfathered plants. I always think it is valuable to have a picture up there of what we are looking at in terms of flue and what we are looking at in terms of size of facilities.

Important under grandfathering between old and new sources, depending on the size, could be up to ten times the emissions of the new plants coming on-line. So it is a significant delta between these plants that were loosely grandfathered in the early-1970s under the Clean Air Act and what new plants are required to meet under BACT standards now.

[Slide] And again, a picture is worth a thousand words. This is a coal pit behind the Dunkirk facility.

A quick aside. We are talking about New Source Review of power plants, but I would be remiss, working for the Lung Association, not to address the structure and equipment — you probably cannot see diesel flue coming out of the stack. But we are talking about another major source of fine particulate and sulfate. So you have coal plants, which is a big source, and diesel-powered construction equipment. The amount of sulfur in diesel fuel is far above, sixty times above, what is allowed for ongoing sources. It is another piece of low-hanging fruit that needs to be plucked. So we are going to work with the State to do that, and hopefully EPA will pick up the ball and address some diesel cleanup issues at the federal level too.

As we saw in the Lung Association, we are an equal opportunity advocate in terms of pollution sources, so while we are looking at power plants, we are also looking at construction.

[Slide] The pollutants affecting lung health:

- Nitrogen oxide (NOx).
- Ground-level ozone. Ground-level ozone acts on lung tissue in the same way that the sun acts on unprotected skin. Ground-level ozone is a very caustic gas. It is used in many purification systems for water in rather high concentrations. It scars the lung tissue if you breathe in too much of it. When you are out on a high-ozone day and you have that feeling of heartburn or inflammation in your chest, that is because you are breathing in a very corrosive gas.

The problem is, however, that skin regenerates; it has to peel, et cetera, but eventually the burn heals. Lung tissue does not heal. So when you damage it, you destroy the tissue.

• Fine particle pollution is the result of NOx and SO2. They are also directly emitted by power plants. You have those gas emissions secondarily emitting fine-particle pollution into the atmosphere, and those are the emissions that are of most concern when you look at the health impacts associated closely with the stacks. The Harvard School of Public Health has done some landmark research looking at old coal-fired power plants in Massachusetts and in the Midwest and really putting a public health context on the health impacts that are around the stacks at those dirty facilities.

[Slide] This is just sort of to give you a flavor of ozone. I apologize. I thought I had a slide of just power plants specifically for NOx ones. This is the ozone overall from all sources. You are looking at a tremendous public health threat.

The dollar cost associated with this is also very tremendous when you look at possible emergency room visits, the typical bill for somebody who is hospitalized when they have an asthma attack, and that is when the asthma is pretty severe. We know there is an increase in asthma emergency visits and hospitalizations when the air quality is poorest. The typical hospital stay costs \$3,000. Think about that. The money starts to add up pretty fast. This is a health care expense that could be cut through pollution cuts. So pollution prevention is actually economic development that will save resources.

[Slide] I want to talk a little bit on the issue of particulate matter. We have been fortunate to have some great analysis done by the Clean Air Task Force, which David Wooley works with, and many of you probably know, out of Boston.

Here in New York they have a wonderful campaign in conjunction with New York Public Interest Research Group, NYPIRG, environmental advocates in New York, and other environmental groups, called the Clean Smokestacks Campaign. We were able to hire some researchers to work on segment analysis which was very specific to the old loosely grandfathered plants in New York. We did an interesting analysis.

Just a note on EXMA [phonetic]. Has anyone ever heard of EXMA? EXMA is actually a model that was paid for by the utilities here in New York. It was created by an order of the Public Service Commission in the early-1990s. It was basically created to assess the impact of the siting of new power plants. It looked at the externalities of building new power plants — that is where you get "EX"

from in this model. It takes into account a whole range of factors. That was a \$3-4 million process in the early-1990s, peer reviewed methodology. It was designed to look at the environmental impacts of new power plants and the health impacts and to assign some dollar amount.

What we did was we hired the gentleman who headed up that team. His name is Rick Freeman [phonetic]. He used to be a Professor at Bowdoin College, a leading authority on externalities models. We had him retrofit the model to look at existing plants. We wanted to get an assessment of what are the health care costs. We did not look at the environmental costs. We just wanted to look at pure health. So it was very similar to the Harvard School of Public Health studies, but we used actually a model created here in New York by the Public Service Commission. The next slide will get into some of the numbers.

Again, I apologize for the "gloom and doom" aspect of this, but keep in mind I always have that "what we can avoid as the opportunity" as well.

[Slide] This is looking at the Abt analysis. Abt Associates is the modeling group that works for EPA when they do their fine particulate and ozone standards.

These are the PM costs. We are looking at effects of fine particulate matter in 2007. Why did we pick 2007? Because we wanted to take into account different programs coming in — 126 petitions, NOx SIP, sector phases, acid rain cuts, et cetera. We wanted to factor those cuts in.

As you look here in New York, the mortalities are significant if you take those into account, what we can do with a 75 percent reduction. We picked a 75 percent reduction because that is essentially what we could achieve if all the old plants were required to adopt BACT, best available control technology. So, you know, loosely coming up to the same source of what a new coal plant would mean.

So you have 1,800 deaths per 100,000. You could cut that down to 1,200. And so on and so forth there.

I want to add in this analysis this takes into account both in-state and the out-of-state emissions that come into New York from the regions in the east and the Midwest.

[Slide] We will get New York State specific here. This is the EXMA [phonetic] analysis looking at New York power plants. We slipped into this slide, just for comparison's sake, a look at Governor Pataki's acid rain initiative and the cut levels achieved there. You can see under sort of 1990 emission rates, those are the numbers that

are up there, the deaths per year due to fine particle pollution, and again what would be achieved if the Pataki plan that is out for public comment now is there, so you've got a cut there. Again, going to modern standards, that is that 75 percent cut level in NOx and SO<sub>2</sub>, you can achieve a significant result.

I did not have the cost figures in this one, but what we can also achieve between where Governor Pataki is proposing to go, coming up to a new source standard methodology with these old plants, it would save about \$115 million in health care each year. That is a significant savings we think, something that needs to really be looked at seriously as we go forward and figure out balancing those issues. There is an economic benefit to reducing power plant pollution here in New York State. That means less lives lost and more health care throughout the State.

[Slide] I just wanted to give you a sense of where the old coalfired power plants are, where the old grandfathered plants are across the state that we analyzed under EXMA and their relative contribution.

I do not want to belabor the point, but when Rachel had her map up before about the ozone levels, it is interesting to note that upstate the numbers were significantly higher.

First ozone exceedence last year on the first day of ozone season, May 1<sup>st</sup>, occurred actually up in Buffalo. There were actually more exceedences of the ozone standard last year at the ozone monitor outside of Albany than there were on Long Island. So it is a statewide threat in terms of ozone and needs a statewide approach to it, so we are happy that New York will be addressing that issue. Hopefully, the Midwest will start gearing up for that as well.

[Slide] These are the graphic representations of what the real opportunity is with these New Source Review cases here in New York. As was mentioned earlier, we've got now lawsuits. They are no longer Notice of Violations and trying to come to agreement. The Attorney General and DEC have now filed suit against the current and former owners of Dunkirk Station outside of Buffalo.

That is their 2000 emission rate for SO<sub>2</sub>. If they had met the BACT standard, if they had to come up with a New Source Review number, you can see a significant decline in SO<sub>2</sub>, and their NOx emissions were also down appreciably.

[Slide] The next slide is Huntley. Again, the same, a very, very similar situation. You have potentially achieving over a 90 percent reduction if they were required to meet a BACT standard under these cases.

[Slide] Finally, the other plants that are still under the pending process. I did not add the EPA data for New York State specifically. If you look, Huntley and Dunkirk were about 50,000 tons of SO<sub>2</sub>. These other plants combined just get a little bit over 70,000 tons. When we talk about a significant portion of the sulfur dioxide pie in New York, if we aggressively go after these plants and others and institute more stringent controls in terms of pollutants under the regulatory structure, I think we would get to the point where we could now claim serious national leadership. And we can also lead by example. Like the way we did in the early-to-mid-1980s on acid rain, because we know that the Senate Members from Ohio are watching us.

When the Governor announced his proposal back in October of 1999, Senator Voinovich said, "Well, New York has just raised the bar. We will have to come to meet them because they are going to be doing exactly what we accused them of not doing. They are going to deal with their own sources."

We think if we raised the bar a little bit higher, we could achieve the significant reduction we need to achieve nationwide to protect the public health.

[Slide] This is the last slide. Again, this is the opportunity, but it is also a good reminder. Shameless promotion of my kids. Andrew is up on the upper left; he turned a year old on Wednesday. My daughter is three. But I use them as wonderful smiling examples of what we are all in this for. It is really the next generation.

The Dutch have a wonderful way of dealing with environmental protection. It is a covenant approach. It is a real forward-looking, macro-level sustainability approach to dealing with things. They do it this way because they want to be able to justify to the next generation the actions they took. They say, "If we cannot look the next generation in the eye and say 'we did this because,' then we have failed." I tend to agree with them.

Andrew, unfortunately, has his birthday the same date that President Bush decided to change his position on addressing carbon dioxide in power plants. He flipped on that position a year ago this past Wednesday and he was born a couple of hours after that. The only reason why I remember that is because I was depressed when I was at the hospital.

But again, I guess I want to go back to the position I had at the beginning. There are a lot of public health threats associated with dirty power. We have tremendous opportunities and tools in our legal toolbox as well as our advocacy toolbox to dramatically reduce pol-

lution. As the keynote speaker addressed, the technology is there. We can bring this technology forward to significantly reduce all four major air contaminants from power plants now. If we can start installing them now so we can dramatically address the air pollution contaminants that affect public health, then we can look that next generation in the eye and say, "We did this because."

I will leave it at that.

MR. FERREIRA: Thanks, Peter.

Scott is going to have to have photos of his children in his slides as well.

I have assured our next speaker that he will get a fair and balanced and objective response from the audience here today. Scott is an attorney with Nixon Peabody, as was mentioned earlier, Chair of their Environmental Practice Group for a number of years. Also, I know Scott because I worked for Rochester and clerked for Rochester.

Scott, it is good to have you. Thanks.

MR. TURNER: Thank you, Jim, and thank you again, Fordham, for hosting this year's program. This is a great opportunity for people to come together and discuss various aspects of energy and the environment and to talk about some very important issues.

No question that the one we are talking about here right now is a very important issue. It is important from a public policy standpoint, but it is also important from a legal standpoint.

The prior presentations — and this is not a criticism of them — were a little short on legal analysis and quite long on public policy analysis, which is fine. But these lawsuits that we are talking about are legal lawsuits, and if the rule of law that binds our nation together is to have meaning, then we have to be making public policy choices that are sustainable under the rule of law. They must be lawful public policy choices.

The premise that I am coming from today in my talk to you is that this enforcement initiative — and I will speak of it in terms of EPA's NSR, New Source Review, enforcement initiative, because it is really EPA that is driving this bus. New York hopped on it, but this is EPA's initiative.

This EPA initiative is not a lawful initiative, in the sense that this is not the right way to be addressing these public policy issues that the other panelists have so eloquently addressed. So whatever you might think about the wisdom of the public policy that is directed at shutting down coal-fired power plants in the United States, I hope

you would agree with me that policy has to be implemented in a legal, lawful way under the rule of law.

Dave Solomon, who is EPA's New Source Review chief, said not too long ago that he believes that "there are times in which EPA as a matter of policy has deviated from what the letter of the law may be."

Well, I would submit to you that the New Source Review initiative is one such instance where EPA has done that. It is not only a deviation. I would submit it is a gross deviation. Let me explain why.

First of all, let me talk for a minute about what led EPA to do this in the first instance. I believe — and EPA would never concede this, I am sure — but I believe that what has led EPA to embark on this deviation from the letter of the law is its frustration over its failed efforts to attack the issue of SO<sub>2</sub> and NOx emissions and other pollutants contributing to the ozone problem.

Starting with the 1990 Clean Air Act Amendments, going right up through 1997-98, EPA has embarked on a number of regulatory initiatives, some voluntary, some regulatory: The Ozone Transport Assessment Group (OTAG) was convened by the Administration to try to grapple with and come to terms with emission reductions in power plants in the Midwest and the Southeast; there was the SIP Call; there was the new Ozone National Ambient Air Quality Standard, the new Particulate National Ambient Air Quality Standard. For various reasons, each of these initiatives has come cropper in one way or another, leading to an enormous amount of frustration, I believe, in EPA over their inability to ratchet down coal-fired power plant emissions in the Midwest and in the Southeast.

So in come EPA enforcement lawyers, and they create a new theory. Their new theory is "we are going to reinterpret this routine maintenance, repair, and replacement exception in the Clean Air Act." This exception has been on the books since about 1980, so we are dealing with a twenty-two-year-old rule, a rule that has a history of twenty-two years' interpretation by not only EPA but by state agencies. In one fell swoop in 1999, EPA attorneys said they can create a theory where they can turn this rule on its head. How did they do that?

First, let me give you a little bit of the context. You have heard a lot in a couple of the presentations about these grandfathered power plants. To the extent that the speakers are intending to use the word "grandfathered" to convey these plants are not subject to regulation, that is wrong, that is simply wrong.

What the term "grandfathering" fails to recognize when it is used in that way is that in 1970, when Congress passed the first Clean Air Act, Congress deliberately chose to treat existing sources differently than new sources. The new sources will be subject to stringent BACT and LAER control technology requirements. The existing sources, on the other hand, were dealt with through the implementation of the National Ambient Air Quality Standards and state adoption of state implementation plans that are designed to ensure the maintenance of those National Ambient Air Quality Standards.

Coal plants, other power plants, did not get a free pass in 1970. To the extent that grandfathering suggests that, it is wrong. These plants were regulated, are regulated, did reduce emissions as a result of the 1970 Clean Air Act.

We have heard there are no longer coal plants in New York City as of 1977. The reason for that? The 1970 Clean Air Act, pure and simple.

So let's put the grandfathering myth aside for a minute.

There are two ways under the structure of the Act that an existing source can make itself a new source and subject itself to new source rules that my fellow panelists want to impose on these existing plants.

One is to reconstruct. That is a very defined term and that is really not the issue that we are addressing.

The second is major modification. We heard what a major modification is. A major modification is a physical or operational change in the way you operate the power plant that causes or results in a significant emissions increase. There is a two-part test.

The part of the test that is being litigated most aggressively right now is the first part of the test, is this a major modification, because of the exclusion.

Now, in addition to the exclusion for routine maintenance, repair, and replacement, there are also exclusions built into the definition of major modification for increasing your production rate and increasing your hours of operation.

But, as the panelists rightly point out, the focus really in the litigation has been on the routine maintenance exclusion.

To get a sense of what the practical implications of this rule are, think of your car as a power plant. Let's say your car is two years old and you plan on driving it ten more years. Well, what is going to happen in that ten-year period? You are going to do routine maintenance, repair, and replacement. You are probably going to change your oil four or five times a year, replace your tires maybe every

three years, replace your muffler two or three times, maybe replace the water pump once. You might change the drive belt a couple of times.

Why do you do this? Well, you do this because your car is a complex machine with a lot of parts to it and not all those parts have the same expected life. Your tires do not have the same expected life as your windshield wipers. So you change parts for maintenance.

Some parts do not even live their expected life. Your water pump was probably designed to live the entire life of your car, but if it fails, you need to replace it.

So it is with power plants. They too are complex machines with many parts, they operate in very harsh environments, and so parts wear out. Tubes need replacement, tubes degrade, pumps fail.

If we are to have a reliable source of electric supply in this country, there must be an ongoing process of routine maintenance, repair, and replacement on power plants. And this applies to all power plants, not just coal power plants.

Literally thousands of routine maintenance, repair, and replacement activities have occurred at power plants around the country in the last twenty years. Let me just give you one set of statistics to give you a flavor of how frequently these kinds of projects are done.

In a survey of just 200 power plants over the course of the last three years, so a sample of 200 plants, there were 174 water boiler replacement projects, there were 293 new superheater replacements, 231 reheater replacements, 300 FIRN [phonetic] replacements. As you can see, as with your car, power plant parts often need replacing a lot more frequently than the life of a power plant.

Now, in challenging activities that occurred sometimes twenty years or so ago — you have heard of the \$25 million project that has drawn the attention of the Attorney General's Office occurred in the early-1980s — so we are dealing with activities that occurred a long time ago.

In challenging those activities, EPA and the Attorney General in the case of New York are essentially arguing that they have not advanced this interpretation previously that projects that the utilities and power plant owners thought were routine maintenance were not routine maintenance. They had not advanced this argument because they were not aware of these power plant owners' practices. Well, that claim is disingenuous at best.

In a five-year period from 1992 to 1997 alone, one five-year period, the EPA data show EPA inspectors did 14,000 inspections on 3,200 individual power plants. To me, it defies common sense that

all those inspections could be going on the Agency would be indifferent to routine maintenance, repair, and replacement that was going on. You know they were there during outages. Did they not ask what was happening in the outage? Of course they did.

And it is not like these projects were hidden from public view, because most of the challenged projects occurred in the era of utility regulation, when utilities were going to the state utility commissions to get rate approval for the expense of doing a lot of this routine maintenance, repair, and replacement work. So these projects were not being hidden from public view. The state environmental agencies were aware of them. Their inspectors were going into these plants.

But EPA's claim is further belied by the fact that they were actually making public pronouncements throughout this entire period, starting in the mid-to-late-1980s, all the way up to 1997, suggesting that utility maintenance practices only rarely would ever become major modifications subject to New Source Review. Certainly the benchmark for that was the *WEPCo* case, where Wisconsin Electric Power and EPA had a major tiff in the late-1980s over a huge, massive, very expensive project at Wisconsin Electric's Port Jefferson plant in Wisconsin. They were actually restarting some shutdown units and doing massive replacements. The Seventh Circuit Court of Appeals said that was a major modification. Well, that was sort of the defining line, and that stayed the defining line right up until this initiative began in 1999.

EPA also asserts that its interpretation as it is now interpreting "routine" is not a new interpretation. Well, it certainly is, because the interpretation has been evolving. What was routine as a result of the WEPCo case is one thing. What was routine as asserted in the orders that were issued in TVA just two years ago was different than that. What is being articulated by the Environmental Appeal Board is even different from what was in the TVA orders. And I heard something from what Joe said here today that suggested even Joe's got a little different take on all this. The sands continue to shift to support this initiative. There is no consistency in how EPA thinks it wants to interpret this exemption.

If I had to articulate what I think EPA's current view is of this exemption, I would say that, in the language of the Appeal Board, it is that minor running maintenance is what is routine. Everything else is not routine and is subject to New Source Review. Thus, repair or replacement of broken equipment that interferes with plant opera-

tion, that you have to take the plant off-line to repair, would not be routine under this EPA test as articulated by the Appeal Board.

Well, what is the problem with that interpretation? The problem with that is that we've got a definition in the regulation that talks about routine maintenance, repair, and replacement. The running maintenance definition takes repair and replacement right out of the equation. Just like you cannot change the tires on your car while your car is running, there are certain parts in a power plant you cannot change without bringing the plant off-line. If that is the test, then everything practically that is done in a power plant is going to be subject to New Source Review.

The implication of this for the industry is pretty staggering. If going forward this is going to be the rule, then virtually all of the minor work at a power plant is going to be subject to New Source Review. Being subject to New Source Review has two aspects from a primary standpoint:

- The first is that if you go to a state agency or to EPA and bring a project to them ahead of time and ask for a determination as to whether it is routine or not, it may take you as much as a year. That was Detroit Edison's experience. It took over a year for them to get an answer from EPA as to whether a particular project was going to be routine maintenance or not. A year.
- And suppose the answer is yes? If the answer is "Yes, you are not routine, you are going to be subject to New Source Review," then you are looking at another year or so

So the prospect of trying to maintain a power plant in running condition to provide reliable electric supply is going to be faced with a constant regulatory approval process that is simply unworkable.

EPA recognizes that. Just last week, the Assistant Administrator for Air said that the New Source Review program is not a practical way to try to force reductions at existing power plants. So they understand the practical problem. But they've got this litigation posture.

Hopefully, by late summer, the *TVA* case will have played its way out in the Eleventh Circuit and we will have an answer. Is the industry's legal analysis right? Is the government's legal analysis right? We should know, at least from one circuit court, by then.

Let me conclude by circling back to the public policy issue. If indeed sound public policy dictates emission reductions at the country's fleet of coal-fired power plants, there is a way to do that. There is a way to do that using the rule of law. We have a process by which we can change the Clean Air Act. We have a process by which we can change the regulation, and do so prospectively, so you do not have fair notice and statute of limitations problems that you have with the cases that are being brought by the government now to try to achieve something that really ought to be achieved through the regulatory process or the statutory process.

If this can be done, you can look on further than the regulatory program that Jim spoke of when he was introducing us all. There is a way to do this legally and appropriately.

Now, I am sure we can disagree about the Governor's program — too stringent, not stringent enough — but there is a way to do it in a public form, with public debate, where the rules are understood.

And it is not just the New York Governor who has done this. Massachusetts is doing this and Connecticut is doing this. So there is a model. There is a way to do this appropriately.

Contrived enforcement hearings are not good public policy vehicles. There are better ones.

Thank you.