

US EPA ARCHIVE DOCUMENT

The information presented here reflects EPA's modeling of the Clear Skies Act of 2002. The Agency is in the process of updating this information to reflect modifications included in the Clear Skies Act of 2003. The revised information will be posted on the Agency's Clear Skies Web site (www.epa.gov/clearskies) as soon as possible.

**TESTIMONY OF
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BEFORE THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

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Thank you, Mr. Chairman and Members of the Committee for the opportunity to speak with you today on the important issue of creating a better approach for reducing pollutant emissions from facilities that generate the electric power we rely on in this country. I believe that this hearing on S. 556 is an important step towards reaching a bipartisan agreement in this matter.

The Bush Administration is committed to putting American ingenuity to work on this tough issue – significantly reducing air pollution from electric utilities. The Administration is committed to updating the Clean Air Act requirements for power generators for the 21st century – but it must be done right to provide a secure energy future for this country. These issues must be seen as one, integrated goal: cleaner air and affordable, reliable energy for American consumers.

At the heart of our approach to multipollutant emissions reductions is the goal of achieving cleaner air and increasing energy supply. In his speech on the National Energy Policy in May, the President noted that a cleaner environment and adequate energy supplies are *not* competing priorities. Indeed, Mr Chairman, the opposite is true -- as we saw just this past summer in California, *not* having an adequate electricity supply is *bad* for clean air.

President Bush and Administrator Whitman have clearly warned that failing to carefully plan for adequate supplies of energy can be bad for the environment. We just witnessed an unfortunate circumstance in California this past summer, when to help keep the lights on state officials had to relax pollutant emissions on power plants and ease limits on high-polluting backup generators. The federal government has taken steps to make sure that the environment in California is made whole down the road, but we believe it is unacceptable to be forced to tolerate higher pollution emissions because of a failure to site and build adequate electricity capacity.

We believe it is crucial that a comprehensive, legislative approach on multi-pollutant emissions reductions also provide industry and public planners with the certainty and flexibility they need to invest in new, clean power generation and efficient transmission. By carefully and responsibly planning, we can prevent in the future having to sacrifice clean air for power like California did last summer.

As the Governor testified some months ago, the Administration approach is to use a market-based trading system that will modernize some of the old, out-of-date rules that are holding us back. We need to set new, ambitious goalposts for industry – and then let American ingenuity and America's businesses find the most cost-effective way of meeting those goals on a clear timeline.

Thus, the President has directed the Administrator of the EPA to work with Congress to develop legislation that would establish a flexible, market-based approach to significantly reduce and cap emissions of NO_x, SO₂ and mercury from power generation. The Administration proposal to limit emissions from power generation will be the centerpiece of the President's promise to deal with emissions from old power plants.

We are delighted that Senator Jeffords and others on this committee share our commitment to modernizing the Clean Air Act. We look forward to working with you to craft a common-sense approach to meeting the challenge of creating a clean, affordable energy supply for America. If we integrate and balance our pursuit of these goals, we can have cleaner air and more reliable, affordable energy. An appropriate, well-designed cap and trade program will create incentives to stimulate investment in clean energy technologies, while ensuring that American consumers can still pay their electricity bills.

We are concerned that the approach taken in S.556 would unnecessarily raise energy costs and jeopardize our energy supplies. Our economy can't afford that, especially at this time. American consumers, and America's employers, need reliable, predictable, affordable energy to light their homes and power their businesses. If we work together, we can achieve our most ambitious clean air goals – without crippling our economy.

The President remains committed to introducing a plan to improve the way we control air emissions from power generators. In the near future, I hope I will have the opportunity to discuss with you the details of such a legislative proposal. I look forward to the additional hearings you will need to address these important issues and to working with the Committee to develop an approach that the President can support.

Introduction

As recognized by the President's National Energy Plan (NEP), one of the principal energy challenges facing us is increasing our energy supplies in ways that protect and improve the environment. Thus, the President directed EPA to propose legislation that would significantly reduce SO₂, NO_x, and mercury emissions from power generation through a cap and trade program. Such a program, coupled with appropriate measures to address local concerns, would provide significant health benefits even as we increase energy supplies and maintain reasonable electricity rates.

Our work on this issue has given us insight that I believe will be helpful to you. The more I learn about the cost and inefficiencies of the current and future regulatory regime to which power generators will be subjected if we do not have new legislation, the more I am convinced that we can -- and must -- develop a smarter approach that protects the environment and public health while reducing the cost to consumers and industry and optimizing the size of both the state and federal government machinery necessary to achieve that protection. It is possible to achieve better results at lower costs,

but not if we simply add yet another program on top of all of the existing regulations.

The current Clean Air Act has been enormously successful, but we can do better. Significant cost savings can be achieved for power generators and consumers through a comprehensive legislative package. I look forward to working with you to develop such an approach to reduce emissions from power generation. We applaud Senator Jeffords for tackling this important issue and for recognizing that a cap and trade program is the best way to achieve these reductions. However, we have significant concerns with S. 556 as drafted. Our analysis to date suggests that it could increase consumers' electricity rates by as much as 50%, which we believe is unacceptable. In addition, the combination of emission reductions and timing is not feasible and could threaten the reliability of electricity supply. We are concerned that S. 556's short timeframes for installation of controls could lead power plants to be taken off-line at important times, which could lead to electricity shortages.

In addition, there are a number of issues that Congress should consider that S. 556 does not address. As drafted, S. 556 would make some existing requirements unnecessary, but would not eliminate them. Rather than add yet another layer of environmental regulations on top of the existing ones, we believe that S. 556 should eliminate those unnecessary existing requirements. S. 556 also does not have an allocation scheme. One lesson we should learn from the success of the Acid Rain cap and trade program is that when certain key issues can be resolved through clear legislation, we can avoid years of litigation, business uncertainty and costs, and delayed environmental protection.

Finally, and most importantly, the Administration strongly opposes including CO₂ reductions in any multi-pollutant bill. The CO₂ provisions in S. 556 will cost consumers too much and endanger our energy security by causing too much electricity generation to switch from coal to natural gas. Greenhouse gas emissions should be addressed in the context of climate change, which is being undertaken by the President's Cabinet level working group. For all of these reasons, the Administration must oppose S. 556. In my testimony today I will elaborate further on these key points.

Background

Over the last 30 years, we have made substantial progress towards improved environmental quality under the Clean Air Act. During this time, gross domestic product has increased almost 160%. At the same time, we have reduced emissions of six key air pollutants by 29%, while coal consumption has increased 77% and energy consumption has increased 45%. Eleven years ago President George H. W. Bush signed into law the most far reaching amendments to the Clean Air Act since its enactment in 1970. Included in those amendments was the Acid Rain cap and trade program, the first program tailored specifically to the utility sector, which is achieving significant environmental and public health benefits at a fraction of the initial cost estimates and with relatively little government bureaucracy. It is time to revisit and update the Clean Air Act once again in order to achieve the additional reductions needed to address public health and environmental problems in the most cost effective manner.

The Acid Rain Program is achieving its emission reduction goal at a fraction of the estimated costs because it allows and encourages innovative thinking and long range planning.¹ The existing program establishes a cap on SO₂ emissions to ensure that the environmental goal is met, and employs an innovative market-based allowance trading program to achieve the goal at lowest cost. Allowances are the currency with which compliance with the SO₂ emissions requirements is achieved. Sources, rather than government, decide the most cost-effective way to use available resources to comply. Units that reduce their emissions below the number of allowances they hold may trade allowances with other units in the system, sell them to other sources or save them for future use. There are neither restrictions on trading nor government second-guessing.

Allowance trading provides incentives for energy conservation and technology innovation that can both lower the cost of compliance and yield pollution prevention benefits. Simply, the allowance market puts a price or value on each ton of SO₂ not emitted. The association of a monetary value with reduced emissions encourages innovation: in the 1990's, scrubber costs decreased by approximately 40% and scrubber sulfur removal efficiencies improved from 90% to 95%, and experimentation led to the blending of fuels to lower emissions. To ensure that the cap is met and to provide credibility, sources also are required to install systems that continuously monitor and report emissions.

The Acid Rain Program has proven to be an excellent model for cap and trade programs. Compliance with the program has been nearly 100 percent and annual emissions of SO₂ from power plants have already been reduced over 6 million tons (about 35 percent) from 1980 levels. Greater reductions earlier than expected have lowered risks to human health and provided benefits to the environment sooner. Acid rain levels were dramatically reduced over large areas of the U.S. and trading did not result in geographic shifting of emissions, or "hot spots", as some feared.

Despite the significant progress we have made under the Clean Air Act, air emissions from power generators are still contributing to serious public health and environmental problems. Administrator Whitman addressed these concerns extensively in her testimony before you on July 26, 2001. Rather than reiterate her testimony, I will emphasize just a few of her key points. Problems associated with sulfur dioxide (SO₂), nitrogen oxides (NO_x), and mercury emissions are of national and international significance, and the interstate and long range transport of emissions continue to play significant roles in the nature and magnitude of the problems. Emission and deposition of SO₂, NO_x, and mercury and their transformation byproducts are known to have a wide range of adverse effects on human health and the environment, including:

- SO₂ and NO_x emissions contribute to fine particles, which are associated with premature mortality, aggravated chronic bronchitis, hospitalizations due to cardio-respiratory symptoms, emergency room visits due to aggravated asthma symptoms, and acute respiratory symptoms.

¹ Governor Whitman's July 26, 2001, testimony before this Committee contains a detailed discussion of the success of the Acid Rain cap and trade program.

Fine particles formed from power plant emissions as well as mobile source emissions are of concern.

- NO_x emissions contribute to ground-level ozone, which aggravates respiratory illnesses and causes lung inflammation, particularly for at-risk populations such as children, the elderly and those afflicted with asthma, emphysema, and other respiratory ailments.
- Mercury emissions contribute to mercury deposition in water. Children born to women who consume large amounts of mercury-contaminated fish while pregnant may be at risk for neuro-developmental defects.
- SO₂ and NO_x emissions contribute to atmospheric sulfate and nitrate concentrations that cause visibility impairment, including impairment in many national parks and wilderness areas.
- SO₂ and NO_x contribute to acid deposition, which damages lakes and streams, adversely affecting the fish and other species that live in them, and leaches nutrients from the soil.
- NO_x emissions contribute to nitrogen deposition that may lead to eutrophication of estuaries and near-coastal waters and can damage forested watersheds.

EPA, states, and industry, working together, have made important strides in addressing the adverse impacts of fossil fuel combustion by the electric power industry since the passage of the Clean Air Act in 1970. Despite significant improvements in air quality throughout the country however, emissions from power generation continue to result in serious health, environmental and economic impacts. In 1999, the electric power industry was responsible for 67% of sulfur dioxide emissions, 25% of nitrogen oxide emissions, and 37% of mercury emissions in the United States.

Business as Usual

The President's flexible, market-based approach to reducing emissions from power generators stands in sharp contrast to the complex web of existing regulations which currently confront the industry. Over the years, Congress, EPA and the States have responded to specific environmental and public health problems by developing separate regulatory programs to address the specific problems. Each individual program uses its own approach on its own timeline to serve its own purpose. Absent changes to the Act, EPA and states will be forced to follow the same approach in future regulations. It is time to consolidate and simplify to achieve our clean air goals. A comprehensive legislative approach with mandatory caps could replace a good portion of the current regulatory requirements with a system that will reduce the administrative burden on industry and governments, use market-based approaches to lower compliance costs, reduce consumers' costs, and increase national energy security by providing the industry with more certainty about its future regulatory obligations. By enacting such an approach, we can achieve environmental and public health protection more effectively and at less cost. If we do it the President's way, it will be a win-win.

There are many regulations in place that will reduce air emissions from electric power generation. These regulations include both federal and State requirements that address a variety of emissions including SO₂, NO_x, CO, PM₁₀, and a number of hazardous air pollutants. These programs

include the National Ambient Air Quality Standards for SO₂, particulate matter and ozone, the section 126 and the NO_x SIP Call rules, the Acid Rain Program, new source review, new source performance standards, and the regional haze rule.

But the regulation of power generators does not end with existing regulations. EPA is obligated by a settlement agreement to issue by the end of 2004 a Maximum Achievable Control Technology (MACT) standard to require source-specific controls of mercury and other hazardous air pollutants from electric utilities. Emissions reductions are required by the end of 2007. States will also be requiring utilities to comply with Best Available Retrofit Technology (BART) programs (either source-specific standards or a trading program) to meet requirements to reduce regional haze.

It is expected that the existing fine particle and ozone standards now in place will also result in further regulation of power generators. Modeling shows that when full implementation of existing regulations such as the acid rain program, the NO_x SIP Call, the Tier II standards for cars and trucks, the heavy duty diesel engine standards, and the low sulfur gasoline and diesel fuel rules are taken into account, additional reductions will be needed to bring areas into attainment. States will be required to develop plans for these areas. In addition, NO_x and SO₂ reductions are also needed to reduce continuing damage from acid rain and nitrogen deposition.

Because states and EPA will have to find some way to significantly reduce NO_x and SO₂ emissions, it is probable that power generators will be required to reduce their emissions significantly. Power generation accounts for a significant percentage of these emissions, and our analysis shows that there are significant reductions available at lower cost than from other sources. Additionally, states know that if they do not get the reductions from power generators, they will have to impose significant reduction requirements on other local industrial and commercial sources or impose local transportation control measures.

Under current law, the necessary reductions would be achieved through the development of individual state plans. States will not just control their own sources, however. They will be reaching out to control power generators and large industrial facilities in other states because transport from other states contributes to both ozone and fine particle pollution in many areas. This is what has happened in the eastern part of the country when states realized that emissions from sources in other states were significantly contributing to their 1-hour ozone non-attainment problems. Under section 126 of the Clean Air Act, a state can petition EPA and request that EPA require reductions from sources outside the petitioning state's borders. The petitioning state is entitled to relief if EPA finds that the sources are significantly contributing to the petitioning state's nonattainment problem. EPA's requirement, adopted in response to section 126 petitions, that sources in a number of eastern states reduce NO_x emissions was recently upheld by the Court of Appeals for the District of Columbia Circuit. Since states now know that EPA has authority to address transport pollution through responses to 126 petitions or by issuing a rule like the NO_x SIP Call, we anticipate that states will be turning to these types of control approaches early in the SIP process. Although those of us who are

traveling that path with the current 126 petitions and NO_x SIP Call believe it will eventually take us to our environmental goal, it has been -- and still is -- a very rocky road for industry, environmentalists, the states, EPA and other stakeholders.

This one-at-a-time, uncoordinated series of regulatory requirements for the power industry is not the optimal approach for the environment, the power generation sector, or American consumers. With most plants needing to install control equipment to meet these requirements, it is likely that this approach would lead to installation of controls that become obsolete and stranded capital investments as additional requirements are promulgated. Further, the attainment efforts of individual States and localities not only impose costs on these entities, but also can increase complexity for companies which face differing requirements when operations cross state lines. These factors are exacerbated by limited timeframes that may constrain available compliance options and thwart long range planning. These and other inefficiencies point to the need for a nationally coordinated approach that could reduce cost while improving environmental progress and accountability.

Changing the Way We Do Business: Certainty, Flexibility, Accountability and Innovation

We believe there is a better way, one that could cost American consumers and industry far less than under current law and ensure protection of the air we breathe in a far more certain, straightforward manner. I know that many members of this Committee share that belief and are also working to develop such an approach. It would provide power generators with more certainty about their regulatory future and thus allow them to make wiser decisions about investments in new technology, which would improve energy security. This Administration is developing such a proposal. It will build on the successes of the Acid Rain cap and trade program. It would establish national cap-and-trade programs for NO_x, SO₂ and mercury emissions from power generators (with appropriate measures to address local concerns). Such an approach will benefit the power generation industry, the economy, and the states, while improving public health and the environment.

Up-front knowledge of future requirements for multiple pollutants would lead firms to follow significantly different and less expensive compliance strategies at individual plants, compared with compliance choices which must be made as requirements are addressed in a sequential manner under the current law. The savings come from the opportunity to make cost-effective plant investment and retirement decisions with full knowledge of upcoming SO₂, NO_x and mercury requirements, rather than investing in "add-on" control equipment to meet the requirements of each regulation. Integration, advance knowledge, and certainty regarding environmental requirements will have even greater value over the coming decade as the electric power industry undergoes further structural changes. An integrated package of measures that addresses both the existing regulatory requirements as well as many future environmental needs would provide the greatest degree of certainty and flexibility for the industry, while achieving the necessary emission reductions at lower cost than under current law.

In exchange for flexibility in methods to control emissions, a full accounting of emissions through

continuous monitoring and reporting is essential, as well as significant consequences for failing to comply. Such provisions have been critical to the success of the Acid Rain Program, encouraging individual sources to find the most cost-effective means of compliance with the collective emission reduction goal.

Flexibility stimulates technological innovation, fuels economic activity and reduces cost to industry and consumers. Strategies and technologies for the control of SO₂, NO_x and mercury emissions exist now, and improved methods are expected to become available over the next several years. The air pollution control and monitoring technology industry is expected to continue to respond with cost-effective compliance solutions just as they have done for the past 30 years. A predictable demand for such jobs over the next 15 years is preferable to the boom and bust cycle created by the current regulatory approach.

This approach also would reduce states' administrative burdens and obligations. A national cap and trade program with appropriate caps for NO_x and SO₂ could provide the emission reductions necessary to bring a significant number of areas into attainment with the ozone and fine particle standards. Even those areas that would not be brought into attainment by these caps would need significantly fewer emission reductions to come into attainment. Our approach would significantly reduce the state resources needed to conduct modeling, planning and regulatory activities to attain the standards. Additionally, the Acid Rain cap and trade program is administered with a relatively small staff relying on strong, state-of-the-art data tracking and reporting capabilities. Thus, well-designed national cap and trade programs can help use government resources and taxpayer dollars more efficiently at both the state and federal level.

Caps ensure that environmental goals are met. A cap that represents significant reductions of emissions protects the environment by reducing overall loadings. Consideration of local concerns is important in conjunction with trading provisions. Therefore, the National Energy Plan recommended that the Administration's approach include appropriate measures to address local concerns, such as the unlikely occurrence of an SO₂ "hot spot" or area of concentrated emissions. Significant reductions will go a long way towards addressing local concerns. In addition, EPA will be conducting modeling that will predict where emissions reductions will occur. Under the Acid Rain cap and trade program, we have not seen local hot spots because the highest emitters are often the most cost-effective to control and therefore, the most likely to control.

As I mentioned, EPA and the Administration are still in the process of developing our proposal. Several guidelines are shaping our efforts. These guidelines may provide a valuable basis as you weigh the proposals before you. They will also guide our assessment of other proposals, including S. 556. These principles are structured to ensure consistency with the NEP objectives. The NEP goals of increasing energy supplies, accelerating the protection and improvement of the environment, and increasing our nation's energy supply must be advanced. Towards that end, energy diversity, the preservation of electricity generation and transmission reliability, and improvement of energy

efficiency/energy intensity of the electric power industry

should be a key consideration. In particular, to prevent the reoccurrence of energy shortages and price volatility, a diverse mix of fuel sources should be maintained.

Specific Comments on S. 556

We share the desire expressed in S. 556 to significantly reduce and cap emissions of SO₂, NO_x and mercury from power generation. We applaud your acknowledgment of market-based incentives, particularly cap and trade systems, as a powerful tool in environmental protection. In this way, S. 556 builds on successful elements of the Clean Air Act.

We do, however, oppose S. 556 because of concerns with the bill -- both with some provisions that are in the bill and with some that are missing. We believe the emission reductions and timing in the bill will be too costly for consumers and will endanger national energy security. We believe the bill is missing some provisions -- it should address the allocation scheme and integration with existing programs. Finally, we oppose inclusion of CO₂ in this bill.

First, let me explain some of our specific concerns about the SO₂, NO_x, and mercury provisions in the bill. We are concerned that the significant emissions reductions are required too quickly. We do not believe it is reasonable to expect all the control technology installations to be completed in that time frame without very high costs and electricity reliability problems. To meet these deadlines, facilities may need to be taken off-line during critical periods. Reliability problems could arise as large amounts of capacity are taken out of service for extended periods of time to install the control equipment necessary to meet the emissions reduction requirements. The abbreviated time frame would force many generators to make these retrofits simultaneously. This would significantly reduce the amount of generating capacity available to meet consumer' electrical needs.

We have not modeled the specific provisions in S. 556, but useful information is provided by comparing the analyses EPA and EIA conducted to respond to a request from Senators Smith, Voinovich and Brownback with the analyses responding to a request from Senators Jeffords and Lieberman. In the Smith/Voinovich/Brownback analysis, when we analyzed SO₂ and NO_x reduction levels similar to S. 556, mercury reduction levels more modest than S. 556 and no CO₂ reductions, we did not find significant impacts on coal production or electricity prices. However, in the analysis responding to the Jeffords/Lieberman request that had NO_x, SO₂, mercury and CO₂ reduction levels similar to S. 556, we found significant ramifications: approximately a 20-30% decline of coal generation and a 30-50% increase in electricity prices compared to the reference case (depending on assumptions of energy technology penetration).

The 90% source-specific control for mercury is also problematic. We have not seen anything that demonstrates that every coal-fired power plant would be able to achieve 90% source-specific controls for mercury by 2007, without considerable fuel switching, which would be very disruptive to our economy and undermine energy security. In addition, requiring the same level of reduction at a

plant that emits 0.1 pounds of mercury and a plant that emits 2000 pounds of mercury – regardless of cost – is neither efficient nor necessary.

We are also very concerned about the “outdated power plant” provision. Requiring every plant over 30 years old to meet New Source Performance Standards and New Source Review modification requirements seems unnecessary and could undermine the benefits of the cap and trade approach. Allowing sources to make reductions where it is most economical to do so is one of the reasons cap and trade programs should be less costly than command-and-control programs that achieve the same or even fewer reductions. When you have a hard cap, as you would under S. 556, requiring emission reductions at a specific source does not reduce the overall level of pollution, it just limits industry’s flexibility about where to make the reductions. Layering additional requirements, such as the “outdated power plants” provision, on top of a cap and trade program is very likely to increase costs without providing significant environmental benefits.

Second, we have concerns about what is not in S. 556. Comparing our experience on the Acid Rain Program with the NO_x SIP Call and the Section 126 petitions demonstrates the benefit of having certain key issues decided by Congress rather than left to Agency rulemakings. Congressional resolution of key issues simplifies whatever Agency rulemaking is needed and decreases the opportunities for the program to get tied up in protracted litigation.

Perhaps the most important program element not addressed in the bill is integration of this new program with the existing Clean Air Act provisions. An effective market-based approach would make some existing provisions of the Clean Air Act unnecessary. For example, depending on the ultimate cap levels chosen by Congress, this type of legislation would obviate the need for Best Available Retrofit Technology requirements, mercury MACT, and new source review case-by-case technology requirements for power generators.

Also missing from S. 556 is the scheme for allocating allowances. Developing an allocation scheme requires answering numerous questions. Should the allowances be auctioned off or be handed out for free? If they are not auctioned, should they be allocated based on heat input or electrical and steam output? Should power generators that do not emit air pollutants (e.g., hydropower facilities) be given allowances? Should allowance allocations be updated, and if so, how frequently? Should allocations be fuel neutral? Imbedded in these and other questions are important environmental and energy policy choices with significant equity consequences. It may not be efficient for EPA to make these choices in rulemaking.

There are other issues as well that this Committee should consider, such as coordination with existing state and regional programs like the Western Regional Air Partnership and the NO_x reduction programs in the east. The Committee may also wish to consider provisions to track environmental progress to evaluate the efficacy of the program this bill would establish.

Finally, the Administration strongly opposes including reductions for CO₂ in S. 556 or any multi-pollutant bill. Pursuing sharp reductions in CO₂ from the electricity generating sector alone would cause a dramatic shift from coal to natural gas and thus would run the risk of endangering national energy security, substantially increasing energy prices and harming consumers.

The Administration will not support any legislation that would cause a significant decline in our nation's ability to use coal as a major source of current and future electricity. At the same time, the Administration will not support any legislation that does not enhance the cleanliness of coal-fired electricity generation and promote a future for clean coal technologies. In short, the Administration supports a clean coal policy as a critical component of our nation's energy and environmental policies, recognizing that other sources of energy also have a critical role to play.

Additionally, as Governor Whitman said when she testified before you in July, including CO₂ in this bill will slow down, if not prevent, the consensus necessary for passage of legislation to control multiple emissions from power plants. Governor Whitman and I both believe consensus on the appropriate levels and timing for reductions of NO_x, SO₂ and mercury is achievable relatively soon. We should not delay the public health and environmental benefits from reduction of these emissions while we wait for consensus to develop on CO₂.

We agree that climate change is a serious issue we need to address. However, CO₂ has never been regulated as a pollutant under the Clean Air Act and does not pose any direct threat to human health unlike NO_x, SO₂ and mercury. The current body of scientific knowledge does not provide information regarding atmospheric concentrations of CO₂ or reduction levels necessary to prevent dangerous interference with the climate system.

In April, the President convened a Cabinet-level policy review of this issue and was provided with initial recommendations that he accepted and announced on June 11. In that regard, the Administration is implementing two major initiatives on climate science and advanced energy and sequestration technologies. The United States now spends \$1.6 billion annually on climate science to reduce uncertainties – a commitment unmatched by any other nation. The “National Climate Change Technology Initiative” will accelerate priority research and the application of advanced energy and sequestration technologies, recognizing that the real answer to addressing climate change in the long term lies in the development and global introduction of such technologies in this century. And the cabinet-level policy review is ongoing. Finally, as greenhouse gas emissions are projected to grow exponentially in the developing world in the next two decades, we must evaluate the costs of imposing domestic reductions as a very high cost against potentially low-cost opportunities for mitigating and sequestering carbon emissions in the developing world.

We appreciate the role of S. 556 in generating important discussions and emphasizing the importance of a new approach to controlling emissions in the power sector. I look forward to the additional hearings you will need to address these important issues and to working with the Committee

to develop an approach that the President can support.

The history of Clean Air Act legislation is one of great accomplishments made possible by bipartisan efforts. I thank you for the opportunity to work with you to continue that great tradition.