## Opening Statement of Bob Perciasepe Deputy Administrator U.S. Environmental Protection Agency

## Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending Committee on Oversight and Government Reform

## July 26, 2011

Chairman Jordan, Ranking Member Kucinich and members of the subcommittee, I appreciate the opportunity to appear before you today to testify on EPA's regulations affecting the electric power industry.

You ask whether EPA's regulations will cause the lights to go out. I can assure you – the answer is no. We do not have to choose between the significant public health benefits from reducing air pollution from power plants and a robust, reliable electric grid to power the U.S. economy.

The power plant rules that EPA is developing are necessary to protect public health and the environment from pollution produced by these plants – especially the oldest, dirtiest, and least efficient of them.

We are not the first Administration to recognize the need to clean up power plants and to issue rules to address that need. In fact, since 1989, when President George H.W. Bush proposed what became the Clean Air Act Amendments of 1990, power plant clean-up has been the continuous policy of the U.S. government under two Democratic and two Republican presidents.

Over the years, many power plants have invested in modern pollution controls to reduce their emissions and have contributed to the significant progress this country has made in providing healthy air to our citizens. Many other power plants, however, have delayed the investments in widely available pollution control equipment. Power plants today are still the country's largest source of SO2 and of mercury, and the largest stationary source of NOx.<sup>1</sup>

Some elements of the power industry have sought for many years to delay the Congressional mandate to control air pollution, especially the requirement to reduce emissions of mercury and other toxic air pollutants through the use of widely available pollution control equipment. The harmful pollution emitted by these plants contributes significantly to a wide variety of public health and environmental problems. While past EPA rules have made progress in reducing the harmful effects of pollution, more

<sup>&</sup>lt;sup>1</sup> EPA National Emissions Inventory. (<u>http://www.epa.gov/air/emissions/nox.htm#noxnat</u>, http://www.epa.gov/air/emissions/so2.htm).

remains to be done to ensure that all Americans have the clean environment to which they are entitled.

EPA's recent and upcoming actions to control pollution from power plants will achieve major public health benefits for Americans that are significantly greater than the costs. These pollution-reducing rules are affordable, and they are technologically achievable.

For example, on July 6, 2011, EPA issued the Cross-State Air Pollution Rule to protect public health and the environment and help states meet air quality standards. The long-overdue Mercury and Air Toxics Standards (MATS) under section 112 of the Clean Air Act, proposed on March 16, 2011, represent the first-ever national limits on mercury and other toxic air pollution released from power plant smokestacks. And EPA is pursuing standards to protect aquatic life from cooling water intake systems under section 316(b) of the Clean Water Act.

There is tremendous public support for moving forward with these rules. For instance, since March, we have received over 800,000 comments from across the country in support of regulating mercury emissions from power plants.

The Cross-State Air Pollution Rule illustrates the significant health benefits from improving air quality. In a single year (2014), the Cross-State Air Pollution Rule is projected to produce benefits valued at \$120 billion to \$280 billion and to avoid:<sup>2</sup>

- Up to 34,000 premature deaths
- 15,000 heart attacks
- 400,000 cases of aggravated asthma
- 19,000 cases of acute bronchitis
- 19,000 hospital and emergency room visits.
- Over 1.8 million days when people miss work or school

In developing these rules, the EPA has focused not only on the long overdue health benefits that will result from decreasing emissions of harmful pollutants from power plants, but also on the economic effects associated with implementing the emission reductions. Our publicly available analyses, which involve detailed modeling of the impacts on the power sector of CSAPR, MATS and 316(b), shows that these rules are affordable.

The investments in a cleaner energy sector required by these standards will create jobs. EPA estimates that the proposed mercury and air toxics rule could support 31,000 job years of short-term construction work and net 9,000 long-term utility jobs.<sup>3</sup> Money spent on pollution controls at power plants provides high quality American jobs in

<sup>&</sup>lt;sup>2</sup> EPA final Cross-State Air Pollution Rule Table VIII.C-1 Estimated Annual Reductions in Incidences of Health Effects Based on 2014 Modeling. http://www.epa.gov/crossstaterule/actions.html

<sup>&</sup>lt;sup>3</sup> Regulatory Impact Analysis for the Proposed Toxics (now MATS) Rule, U.S. EPA, March 2011. <u>http://www.epa.gov/ttn/ecas/regdata/RIAs/ToxicsRuleRIA.pdf.</u>

manufacturing steel, cement, and other materials needed to build the pollution control equipment, in creating and assembling control equipment; in installing the equipment; and in operating and maintaining the equipment. And many of these are jobs that cannot be shipped overseas.

While you will hear from some in industry that the rules are not achievable and not cost effective, our analysis and past experience indicate that warnings of dire economic consequences of moving forward with these important rules are exaggerated at best.

For example, during development of the 1990 Clean Air Act Amendments, industry estimated that the cost of the new requirements for sulfur dioxide would be \$7.5 billion per year. In reality, the cost of achieving the reductions was around a \$1.5 billion per year – a fraction of the costs estimated by those seeking to prevent enactment of that landmark legislation.<sup>4</sup>

In fact, at the time, American Electric Power warned of "the potential destruction of the Midwest economy." The Southern Company warned of unrealistic compliance dates and issues with electrical reliability. These predictions were not true then, and industry's remarkably similar claims about the current Clean Air Act regulations are not true now.

A rigorous, peer-reviewed EPA study of the 1990 Clean Air Act amendments has found that they are delivering health improvements to the American people worth \$30 in benefits for every \$1 in costs.<sup>5</sup> Most of the \$30 in direct benefits comes from avoided premature deaths as a result of cleaner air, with other benefits including fewer emergency room visits over the years for an asthmatic child, fewer sick days for an American worker trying to compete in the global marketplace, and longer and healthier life for an elderly retiree. Not all of these benefits of cleaner air show up in GDP and other measures of economic activity, but they nonetheless have real value to the people who experience these health gains. Furthermore, EPA's peer-reviewed study also found that fewer sick days for American workers and lower health care costs for American families achieved by cleaner air leads to an economy which grows faster and is healthier in the long run.

The reductions can be met using controls that are well understood and available, the standards allow adequate time for compliance, and we estimate that national electricity rates will not rise above historic levels, although there will be regional variations. In fact, industry has moved rapidly to comply with past requirements. For example, scrubbers

<sup>&</sup>lt;sup>4</sup> National Acid Precipitation Assessment Program Report to Congress: An Integrated Assessment, 2005 http://www.epa.gov/airmarkets/resource/docs/NAPAP.pdf

<sup>5</sup> U.S. Environmental Protection Agency (2011). The Benefits and Costs of the Clean Air Act from 1990 to 2020 - Rev. A. April 2011. http://www.epa.gov/cleanairactbenefits

have been installed on units accounting for an average of 20 gigawatts of generating capacity each year between 2008 and 2010. The industry also added 150 gigawatts of new generating capacity between 2001 and 2003.

EPA conducted feasibility analyses for both CSAPR and the MATS proposal. The analysis for the proposed MATS rule takes the proposed CSAPR (then called the Transport Rule) into account. According to our analysis, companies will have sufficient time to meet their Clean Air Act regulatory requirements:

"Our analysis shows that the expected number of retirements is less than many have predicted and that these can be managed effectively with existing tools and processes for ensuring continued grid reliability. <u>Further, the industry has adequate resources to install the necessary controls and develop the modest new capacity required within the compliance schedule provided for in the CAA. Although there are a significant number of controls that need to be installed, with proper planning, we believe that the compliance schedule established by the CAA can be met. . . . EPA believes that the ability of permitting authorities to provide an additional 1 year beyond the 3-year compliance time-frame as specified in CAA section 112, along with other compliance tools, ensures that the emission reductions and health benefits required by the CAA can be achieved while safeguarding completely against any risk of adverse impacts on electricity system reliability."</u>

EPA specifically addressed reliability in the MATS preamble and concluded that Clean Air Act requirements could be met without adversely affecting power sector reliability:

"In summary, EPA believes that the large reserve margins, the range of control options, the range of flexibilities to address unit shutdowns, existing processes to assure that sufficient generation exists when and where it is needed, and the flexibilities within the CAA, provide sufficient assurance that the CAA section 112 requirements for the power sector can be met without adversely impacting electric reliability."<sup>I</sup>

<sup>&</sup>lt;sup>6</sup> Excerpts from May 3, 2011 FR notice -- MATS proposal, page 25057 http://www.epa.gov/ttn/atw/utility/fr03my11.pdf

<sup>&</sup>lt;sup>7</sup> Excerpts from May 3, 2011 FR notice -- MATS proposal, page 25057 http://www.epa.gov/ttn/atw/utility/fr03my11.pdf

Our analyses have been corroborated by other outside groups and by some in industry who are calling for us to move quickly to implement the new regulations.<sup>8</sup> While some in industry are seeking to delay the upcoming regulations, many others recognize that issuing the rules in the same timeframe helps provide power companies with the certainty they need to make smart and cost-effective investments. The Clean Energy Group<sup>9</sup> recently said, "Needed regulatory certainty will result from EPA's timely implementation of regulations consistent with the Clean Air Act, which is in the best interests of the electric industry, the market, and customers."<sup>10</sup> The Chief Executive Officers of eight electric companies have also stated that: "Contrary to claims that EPA's agenda will have negative economic consequences, our companies' experience complying with air quality regulations demonstrates that regulations can yield important economic benefits, including job creation, while maintaining reliability."<sup>11</sup>

The Chairman and CEO of Wisconsin Energy has said, "We see very little impact on customer electric rates or our capital plan between now and 2015 as a result of the new EPA regulations."<sup>12</sup>

As we did more than two decades ago during debate of the Clean Air Act Amendments of 1990, we are also hearing claims that our rules will lead to potential adverse impacts on electric reliability. EPA has examined impacts on the amount of available generation as it proposes and finalizes its rules so far, and the Agency will build upon these analyses as it finalizes upcoming power sector regulations. These analyses project that the EPA rules will result in only a modest level of retirements – of older, dirtier, less efficient power plants – and that these retirements are not expected to have an adverse impact on electric generation resource adequacy.<sup>13</sup> Our rules will not cause the lights to go out.

http://www.thecleanenergygroup.com/documents/Letter\_Jackson\_UtilityToxicsRule.pdf

<sup>&</sup>lt;sup>8</sup> "Transport Rule Engineering Feasibility Response to Comments" for the Cross-State Air Pollution Rule. http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2009-0491-4529

<sup>&</sup>lt;sup>9</sup> The Clean Energy Group's Clean Air Policy Initiative members include Austin Energy, Avista Corporation, Calpine Corporation, Constellation Energy, Exelon Corporation, National Grid, New York Power Authority, NextEra Energy, PG&E Corporation, Public Service Enterprise Group, Inc., and Seattle Light.

Light. <sup>10</sup> Letter to Lisa Jackson, Administrator, EPA, from Michael Bradley, Executive Director of the Clean Energy Group's Clean Air Policy Initiative (June 15, 2011),

<sup>&</sup>lt;sup>11</sup> Peter Darbee, chairman, president and CEO,PG&E Corp.; Jack Fusco, president and CEO, Calpine Corp.; Lewis Hay, chairman and CEO, NextEra Energy, Inc.; Ralph Izzo, chairman, president and CEO, Public Service Enterprise Group, Inc.; Thomas King, president, National Grid USA,; John Rowe, chairman and CEO, Exelon Corp.; Mayo Shattuck, chairman, president and CEO, Constellation Energy Group; Larry Weis, general manager, Austin Energy, "We're OK With the EPA's New Air-Quality Regulations," Letter to the Editor, Wall Street Journal, December, 8, 2010.

<sup>&</sup>lt;sup>12</sup> May 3, 2011 Wisconsin Energy Corporation 1<sup>st</sup> Quarter 2011 Earnings Call.

<sup>&</sup>lt;sup>13</sup> The Cross-State Air Pollution Rule projects about 5 GW of incremental coal capacity retirements by 2014. Analysis for the MATS proposal predicts that the rule results in about 10 GW of incremental coal capacity retirements by 2015. Total coal fired capacity for the US is about 315 GW.

A number of analyses of the Agency's rules have been done in the last several months.

In August 2010, the Analysis Group released a report commissioned by several utilities on the reliability impacts of the Cross-State Air Pollution Rule and Mercury Air Toxics Standard. Their analysis concluded that the "electric industry is well-positioned to comply with EPA's proposed air regulations without threatening electric system reliability." This month, they updated that report based on the actual Mercury Air Toxics Standard proposal, recent financial statements from industry, and recent activity in the markets for additional electricity capacity. This update "reaffirms the major conclusion of the prior report that the electric industry can comply with EPA's air pollution rules without threatening electric system reliability provided that EPA, the industry and other agencies take practical steps to plan for the implementation of these rules and adopt appropriate regulatory approaches."14

The most recent analysis conducted on these issues is last month's report by the Bipartisan Policy Center. That report identified a variety of significant flaws in many of the previous industry studies of reliability and concluded that "scenarios in which electric system reliability is broadly affected are unlikely to occur."<sup>15</sup>

EPA is aware of industry studies suggesting, contrary to the EPA's and other groups' analyses, that these rules will result in substantial power plant retirements that will have adverse effects on electric reliability in some regions of the country. While the particulars of these analyses differ, in general they share a number of serious flaws that call their conclusions into question:

- First, these studies often make assumptions about the requirements of the EPA rules that are inconsistent with, and dramatically more expensive than, the EPA's actual proposals. In most cases, the analyses were performed before many of the regulations in question were even proposed.
- Second, in reporting the number of retirements, many analyses fail to differentiate between plant retirements attributable to the EPA rules and inefficient and costly plants that that are already scheduled for retirement because owners make the business decisions not to pay to clean up their emissions.
- Third, many analyses do not account for the whole host of tools, including new generation, demand response, energy efficiency, transmission upgrades and energy storage, that can be used to maintain reliability.

 <sup>&</sup>lt;sup>14</sup> Analysis Group, June 2011, "Ensuring a Clean, Modern, Electric Generating Fleet while Maintaining Electric System Reliability" (emphasis added).
<sup>15</sup> Bipartisan Policy Center June 2011, "Environmental Regulation and Electric System Polichility"

Bipartisan Policy Center, June 2011, "Environmental Regulation and Electric System Reliability"

For example, the North American Electric Reliability Corporation (NERC) report released last fall attributed the "greatest potential impact" to the not-yet-proposed section 316(b) cooling water intake rule. The analysis incorrectly assumed that in order to deal with the entrainment aspects of cooling water withdrawal, the EPA's rule would require installation of cooling towers at virtually all existing power plants. In reality, the proposed rule requires a plant-by-plant determination of appropriate technology for entrainment by permitting authorities (mostly State) and requires these authorities to take costs and impacts on electric reliability into account. This assumption alone accounts for up to 40 gigawatts of projected retirements, and several other studies share this same assumption. The now proposed 316(b) rule is based on site-specific decisions to determine if cooling towers are appropriate, and while it is not possible to predict how much capacity will be affected, it will clearly be less than originally predicted. Moreover, industry has applauded this flexible, site-specific entrainment determination. . The NERC report also failed to include many relevant response measures available to States, State Public Utility Commissions, and utilities, and relied on an out-of-date long-term reliability assessment<sup>16</sup> (also done by NERC) that understated future electric generating capacity slated to come online and overstated future growth in electricity demand.

Simply put, many of the studies which have dire predictions for increases in electricity rates, reliability and other economic consequences are not based on the reality of the proposals the Agency is considering. The Agency's robust analyses indicate that the proposed regulations will continue to build on the EPA's 40-year record of success in reducing harmful pollution while growing our economy.

In closing, I would like to suggest that the subcommittee should be clear about what is at stake here as those who have stalled in cleaning up their pollution call for further delays. Delay encourages companies to keep cash on the sidelines instead of spending it putting people to work modernizing their facilities. And most importantly, delay means that the public health benefits of reducing harmful pollution are not realized.

Thank you for the opportunity to testify today. I look forward to your questions.

<sup>&</sup>lt;sup>16</sup> http://www.nerc.com/page.php?cid=4%7C61