

Testimony of Steven Corneli  
before the  
Clean Air and Nuclear Safety Subcommittee  
Environment and Public Works Committee  
(revised)

July 9, 2009

Good morning, Chairman Carper, Ranking Member Voinovich, and Senators. I want to thank you for inviting me to testify here today on behalf of NRG Energy. NRG owns some 23,000 megawatts of power plants in the US, making us the second largest all merchant power company in the country. We have power plants in the Northeast, including New York, Delaware and Maryland, in Louisiana, Texas and California. Our fleet includes coal, natural gas, and nuclear plants and we are actively developing new wind, nuclear and solar thermal, with solar projects announced in both New Mexico and California. We are active members of USCAP and are strong supporters of cap and trade legislation for climate change. We take other air emissions seriously, as well, and have spent over \$400 million in the last 5 years on reducing our emissions of sulfur dioxide (SO<sub>2</sub>), nitrous oxides (NO<sub>x</sub>), and mercury, with an additional \$900 million of planned spending over the next several years. I am happy to share our views today regarding additional legislation for further reducing those emissions.

At the start, let me say we supported the Clean Air Interstate Rule. But as we have read the various court orders affecting CAIR, we are concerned that EPA may not be able to craft a rule that would be both environmentally effective and economically reasonable without new legislative authority.

Legislation can help EPA to achieve these goals by providing both specific authority and a framework for rule development. Such legislation should clearly authorize EPA to address regional and national emission transport problems under Section 110(a)(2)(D) of the Clean Air Act through market-based systems.

Additionally, Congress needs to impose on coal-fired electric generating units an obligation to control mercury emissions within a reasonable time frame and remove fossil-fuel fired electric generating plants from Section 112 of the Clean Air Act. Mercury poses a clear environmental and health hazard that must be addressed. However, it is important that power plants be removed from Section 112 to avoid undermining the flexibility created by the cap & trade program designed to address SO<sub>2</sub> and NO<sub>x</sub> emissions.

Such legislation would minimize the cost of achieving additional emission reductions to the nation and to the regulated entities, while providing the stable regulatory framework businesses need to make the significant investments associated with reducing emissions.

Today, I want to cover four basic principles that, in our view, should guide the development of such legislation:

- First, cap and trade has been a real success in reducing sulfur dioxide and acid rain. Congress should modify Title IV to authorize EPA to utilize the allowances created under the Acid Rain Program to reduce the transport of SO<sub>2</sub> emissions that contribute to fine particle nonattainment problems. Congress also should expressly authorize EPA to create a regional NO<sub>x</sub> emission transport program that requires reductions in NO<sub>x</sub> emissions from power plants to address both fine particle and ozone problems, similar to that established under the CAIR.
- Second, we need to do this in a way that builds on the successes of the acid rain program, and improves on it where experience shows improvements are warranted. For example, a key lesson learned, in our view, is that caps need to become tighter as emissions fall in order to spur continued investment in emission reductions.
- Third, the cap and trade programs should continue to allocate allowances to affected sources. Reasonable allocations provide a positive incentive to businesses, while minimizing their costs of compliance, and have the added benefit of increasing support and reducing opposition to legislation which, as noted above, we believe is needed.
- Finally, implementation of the SO<sub>2</sub> and NO<sub>x</sub> cap and trade systems, as well as the mercury control requirements, should align in time with the major investment decisions that will be made under the emerging climate change program. This coordination is critical to allow companies to make long-term capital plans for controlling or retiring power plants, building new capacity and investing in conservation to ensure a reliable, affordable electricity supply.

*Use cap and trade to minimize economic cost and maximize net benefits.* The success of the acid rain cap and trade program is well known. The EPA reports that emissions of sulfur dioxide from covered sources were reduced by over 40%, from 15.7 million tons in 1990 to 7.6 million tons in 2008. And, while the EPA originally predicted that SO<sub>2</sub> allowance prices would be in the \$500 to \$1000 range, innovation and competition among different ways to reduce sulfur emission actually produced prices in the \$100 to \$200 range.<sup>1</sup> As the nation seeks to achieve additional reductions in sulfur and nitrous oxide emissions, it owes it to its citizens, businesses, and economy as a whole to continue to use this tried and true approach to reducing emissions at the lowest cost.

---

<sup>1</sup> *Acid Rain Program 2005 Progress Report*, EPA-430-R-06-015

*Build on the lessons learned from the Acid Rain Program and other emission markets.* One of the key lessons learned from the acid rain program and CAIR to date is that investments in reducing pollution depend on commercial and legal continuity of the regulatory program. Commercial continuity can be harmed when reductions lead to emissions falling below the cap, leading to a relative surplus of emission allowances and excessively low prices. Legal continuity can be harmed when litigation results in uncertainty about the future validity of the program. Both types of events create risk that the billions of dollars spend on reducing emissions will not be recovered, and both need to be guarded against. To do so, legislation should provide:

- Regularly scheduled reductions in the cap itself, designed to achieve the total targeted reductions over a realistic time frame, considering the availability and likely cost of various means to effectively reduce emissions
- The continued ability to use banked allowances, earned through previous emission reductions, for compliance purposes. It may be desirable to balance the supply of these allowances with demand by adjusting the quantity of allowances that can be used to cover a ton of emissions in the new regime (e.g., through CAIR's 2:1 and 2.85:1 multiples.)
- Robust and clear provisions to deal with the critical issues raised in the CAIR remand and other potential litigation drivers.

*Use moderate allocations to buffer impact and improve incentives.* Allocations, if designed properly, help keep the cost of compliance low, while avoiding windfalls and creating strong positive incentives for investment in clean energy production. Historically, the Acid Rain Program's full allocation made sense in the context of a regulated utility sector. The EU ETS, however, demonstrated that full allocation can lead to windfalls in a merchant or competitive power market, if the free allowances exceed a covered entity's net compliance costs – that is, the portion of compliance cost that it cannot pass through in higher power prices.

As a general principle, NRG supports this net compliance cost approach to allocations, with the potential for additional allocations to be passed through to consumers by regulated electric distribution companies (whether stand-alone or as part of a vertically integrated utility) if necessary to buffer significant retail cost increases.<sup>2</sup> With respect to NO<sub>x</sub>, legislation should enable the CAIR allocation approach to continue essentially as is, though with appropriate reductions consistent with a cap that gets tighter over time. With regard to SO<sub>2</sub> allocations, our recommendation is to continue the CAIR provisions through 2015. After that, ongoing allocations should be consistent with the net compliance cost principle, and in addition, previously banked acid rain program allowances should be valid for compliance use, with a multiple as provided for in CAIR.

---

<sup>2</sup> This is the approach used in HR 2454 for greenhouse gas emission allowances.

*Integrate and coordinate with climate change legislation.* NRG is committed to the passage of environmentally effective, economically sustainable climate change legislation that includes cap and trade, complementary measures to support the rapid deployment of low and no carbon technology, and fair allocations to buffer the cost impact on both consumers and businesses, while avoiding windfalls. In our view, such a policy is among the highest national priorities for the environment, energy security, and investment and innovation.

There is good reason to believe that such a policy will lead to rapid reductions of air pollution due to reduced emissions from power plants, other large stationary sources of greenhouse gases, and automobiles. In the power sector, in particular, we anticipate that post combustion carbon capture and sequestration (CCS) will coincidentally lead to dramatic reductions in the emissions of sulfur dioxide, nitrous oxides, particulates and mercury from the more efficient existing fleet of coal plants. CCS for new coal plants will have a similar effect, while an increasing price on carbon will render less efficient existing coal plants uneconomic, leading to earlier retirement than without a cap and trade regime. At the same time, increased efficiency and increased electrification of automobiles should dramatically reduce the emission of ozone precursors from mobile sources. Legislation addressing other emissions should be crafted in a manner that anticipates and helps support the massive investment in low and no carbon technologies that regulated entities will be called upon to make, and the likely reductions in non-GHG emissions that will accompany these investments.

I look forward to any questions you may have.