INSTITUTE OF
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COMPANIES

Senate Democratic Policy Committee

Hearing on EPA Proposal to Regulate Mercury Emissions from Power Plants

Testimony of the Institute of Clean Air Companies (ICAC)
Presented by David C. Foerter, Executive Director

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Good morning. I'm Dave Foerter, Executive Director for the Institute of Clean Air Companies ("ICAC" or "the Institute").

The Institute is the nonprofit, national association of companies that manufacture, supply, and service air pollution control and monitoring systems for a broad range of air pollutants, including mercury from power plant and industrial sources. The Institute represents a diverse group of approximately eighty companies dedicated to air pollution control. As such, the Institute represents the full range of competing technologies, rather than any single technology. In the few minutes I have here this morning, I'll begin with the "bottom-line."

Our industry believes that a 50 to 70 percent reduction from current mercury emissions of 48 tons per year is feasible by 2008 to 2010. As a result, over the next 4 to 6 years, it is reasonable and cost-effective to achieve a utility mercury budget of 14 to 24 tons. The air pollution control industry has both the technology and the resources to exceed the magnitude of NO_x, SO_2, $PM_{2.5}$, and mercury reductions, and in a shorter time frame than proposed by the U.S. Environmental Protection Agency (EPA).

It is important to remind ourselves that air pollution control technology markets have historically worked well. Studies show that the certainty of regulatory drivers spurs technical performance and cost improvement. And total costs fall dramatically as control technology moves from R&D to full-scale commercialization. It is reasonable to assume that even with the tremendous technological achievements already made, the traditional successful operation of the air pollution control market will also apply to the development and enhancement of mercury emission controls. The key to well-functioning markets is regulatory certainty. If the goal is technological innovation, then it is important to enact a clear, certain, performance-based mandate. While the Institute advocates flexibility in meeting control requirements, that compliance flexibility should be considered only after setting emissions budgets that adequately protect public health and make use of the capabilities of control technology.

One technology in particular, activated carbon injection, has been used for at least a decade in the waste to energy industry to achieve mercury reductions of at least 80 to 90 percent. This technology has been successfully transferred to the power sector for

commercial use. Activated carbon injection provides a relatively low cost solution, with very little capital investment and relatively low operating costs. In addition, control performance can be increased and operating cost decreased, if activated carbon injection is coupled with fabric filter particulate control devices. In an intensive effort over the last five years, this technology has been rigorously demonstrated through the Department of Energy's (DOE) Clean Coal Power Initiative at full scale on electric power plants, with additional demonstrations to be completed by 2005. The demonstrations identified and addressed power sector mercury control issues, but, more importantly, dramatically removed potential barriers and enhanced the technology. R&D has already matured to full-scale demonstrations and are applicable to a wide range of coal types and existing equipment configurations. Many of these project teams include utility end-users as well as technology developers, which indicates the wide-ranging, cooperative effort underway. The success of this work and other applications, have now all but obscured the 1999 Information Collection Request (ICR) data that was used by EPA to propose the MACT floor. EPA's data shows that existing controls not intended to reduce mercury, had a side-benefit of removing other pollutants, including mercury. In fact, reliance on the 1999 ICR data promotes switching between coal types to achieve compliance, while the more current data shows economical compliance can be achieved without coal switching.

As we have informed EPA and others, a growing number of companies offer commercially available mercury control technologies for sale to the electric power sector. In fact, there are an increasing number of electric utilities actively procuring these technologies and services. Several other technologies are in various stages of development and commercial availability, ready to compete as compliance options under the Utility MACT program. We believe that Congress or EPA does not have to pick technology winners and losers; the marketplace is adept at doing so. The course of technology development is too unpredictable to say what the best approach will be and experience strongly indicates that there will not be one universal approach.

The rapid development of mercury control technologies make it feasible for the electric power sector to cost effectively reduce significantly more mercury emissions than called for under the proposed Utility MACT program. Assuming the implementation of a MACT program requiring control at each plant, it is estimated that a 50 percent reduction from the current emission level of 48 tons of mercury down to 24 tons is achievable. To achieve greater levels of control, there will be performance differences at each site due to differences in coal, equipment, and flue gas characteristics. At some power plants mercury control technology can reduce mercury emissions by 90 percent or greater. Therefore, if a mercury control program included compliance flexibility it is expected that a 70 percent reduction in emissions (down to 14 tons of emissions) is achievable.

Even within the MACT program constraints, EPA can provide compliance flexibility to achieve a high level of mercury control under the Utility MACT timeline without negatively affecting generation. Some of these mechanisms have been used in previous EPA regulations, both MACT and acid rain rules, such as: long term averaging, limits that specify a percent removal and emission rate, early reduction incentives such as those used under the Title IV NO_x provisions or Section 112 (i) (5) and (6), or a safety net approach that requires significant reduction with some flexibility for difficult applications. It is important that flexibility include the performance that is achievable by technology, rather than a prescription for a particular technology.

The air pollution control industry has already achieved commercial readiness of mercury control and measurement technologies, even without the certainty typically provided by regulatory or legislative market drivers. Mercury control technology is available today at the reasonable cost of 0.1 to 0.3 cents per kW-hr, compared to and average retail rate of 8 cents per kW-hr. Mercury control technologies are currently available for a range of coals and equipment and will be available for every utility configuration and every coal type in the near future. Mercury reductions of 50 percent (24 tons of emissions) are achievable by 2008 to 2010, and up to a 70 percent (14 tons of emissions) would be achievable by all utilities if there were some flexibility in regulation or legislation.

On behalf of the more than 130,000 men and women in our nation that work to supply air pollution control and monitoring technology for stationary sources, we congratulate efforts to develop meaningful and flexible approaches to control emissions from the electric power sector. Dollars spent on compliance are recycled in the economy, generating jobs in construction, materials fabrication, and engineering. The Institute predicted that multi-pollutant control requirements would create 300,000 new U.S. jobs.

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

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