

**Testimony**

**of**

**George Ellis  
President  
Pennsylvania Coal Association**

**Before the  
SENATE ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE**

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**Regarding Mercury Control Issues**

**Pennsylvania Coal Association  
212 N. Third St., Suite 102  
Harrisburg, PA 17101  
Phone: 717-233-7900  
Email: [pacoal1@aol.com](mailto:pacoal1@aol.com)**

Good morning. Chairman White, Chairman Musto and members of the Senate Environmental Resources and Energy Committee; my name is George Ellis and I am President of the Pennsylvania Coal Association (PCA).

PCA is a trade organization representing bituminous coal operators – both underground and surface – as well as other associated companies whose businesses rely on a thriving coal economy. PCA member companies produce over 75 percent of the bituminous coal annually mined in Pennsylvania.

We thank the Committee for this opportunity to provide our perspective on regulating mercury emissions from Pennsylvania's coal-fired power plants. This is a very critical issue for PCA member companies since the outcome of this debate will significantly affect the major market for Pennsylvania coal.

First, Attachment I of my testimony contains a memo from PCA and the UMWA to all state Senate and House members responding to the misleading and inaccurate statements about our position on the mercury control issue made by Secretary Kathleen McGinty in testimony before this Committee last week. I ask that the attachment be included as part of my testimony in the record.

I have done it in this manner instead of addressing it in my remarks to maximize my allotted time focusing on the many issues involved in the mercury debate. We do not take these allegations lightly. I will be happy to address this issue during the Question and Answer portion of my testimony.

Pennsylvania is the fourth leading coal producing state, mining 72.7 million tons last year with a workforce of almost 7,000 employees. Almost 80 percent of this output came from 46 underground mines and the remainder from 347 surface mining and reprocessing sites.

Coal has been and will continue to be the major fuel of choice for electricity generation. Fifty percent of the United State's electricity is generated by coal and coal accounted for 56 percent of the total amount of electricity produced in Pennsylvania last year. Persistent high natural gas and oil prices and capacity limitations at nuclear plants will favor greater coal utilization to fuel the projected increases in electricity demand. Simply put, there is no other energy source that can produce electricity in that quantity at such a low cost for many years in the future. If Pennsylvanians are to continue to enjoy a reliable and affordable supply of electricity the Commonwealth must continue its reliance on coal.

In addition, coal is by far the least expensive fossil fuel on a dollar per million BTU basis for electric generation. While natural gas prices have increased 150 percent in just the last four years, coal remained much less expensive and far more reliable. In 2005, the average cost of producing electricity from natural gas was \$8.33 per million BTU. The cost for coal was \$1.54 per million BTU.

As you would expect, the steam coal market is by far the largest customer for Pennsylvania coal. About 70 percent of Pennsylvania's annual coal production goes to the electric utility sector, principally but not exclusively to PA coal-fired power plants.

Of the 52 million tons of coal consumed by PA's electric utilities in 2003, 34 million tons was mined in PA, about 50 percent of our total production. Clearly, preservation of this market is essential to the continued viability of the PA coal industry.

PCA supported the PA law that deregulated the electric utility industry because we believed that competition would place a premium on cost-effectiveness and reliability. As generation becomes more and more competitive, the future would belong to the lower cost fuel source, which in any scenario, would be coal.

However, competition depends on the existence of a level playing field on which various fuel options can equally compete. Unfortunately, this is not always the case, particularly given the unevenness and uncertainty surrounding air quality regulations.

For example, if PA's air quality standards are more onerous than standards adopted by other states or nationally uniform standards, it can make PA coal more expensive to burn because of compliance costs or impossible to use because of non-compliance with the tougher rules, thereby destroying coal's competitiveness in the "customer choice" electricity market. Of equal concern is a federal rule that unfairly gives one coal rank preference over another.

A utility's options to comply with such unilateral state regulatory action are to switch fuels, buy compliance coal from out-of-state mines or purchase coal based electricity generated in other states. The consequences of any of these actions is the premature closing of PA coal-fired plants, particularly older units, and the potential loss of the PA coal industry's major customer base.

It is therefore essential that, absent a compelling state-specific need, the air quality standards that PA's electric utilities must meet are the same as or substantially equivalent to federal mandates governing all utilities. Anything less will bias a significant part of the steam coal market against Pennsylvania coal.

A case in point is the mercury control issue.

PCA's position has been consistent throughout the development of mercury control regulation and legislation. We have worked towards a program that strikes an appropriate balance between 1) minimizing the public health risks of mercury exposure and 2) preserving, to the maximum extent possible, the economic competitiveness of Pennsylvania coal as a source of electricity as we protect the jobs of coal miners and other workers employed at mining-related industries.

Given the high content of mercury in Pennsylvania coals and the unavailability of mercury control technology, we recognized that any attempt to curb mercury emissions at coal-fueled power plants, including the federal rule and state regulation, could offer the potential for disrupting coal markets and employment. We, therefore, sought to pursue all appropriate remedies on the federal and state levels to minimize the potential for displacement of Pennsylvania coal and loss of jobs.

In this regard, PCA supported the federal Clean Air Mercury Rule (CAMR) and its cap and trade program with one exception – the mercury allowance allocations provision that disadvantaged eastern coal.

Essentially, the allowance allocations adjustment factor inflates the allowance allocations of electric generating units (EGUs) that use subbituminous or lignite coals. Since EPA combines all of the allowances for each unit within a state in calculating each state's mercury emissions "budget," states where utilities primarily use subbituminous or lignite coals (e.g. Texas and Wyoming) have substantially higher mercury emission budgets than states like Pennsylvania, where bituminous coal is used by the state's coal-fired EGUs.

Simply put, the provision allows units that burn subbituminous coal to emit more mercury than those burning bituminous coal.

To address this provision and with the knowledge and encouragement of Secretary McGinty, PCA joined with six other state coal associations, bituminous coal operators and the UMWA in filing a lawsuit. The lawsuit is narrowly focused on challenging only the allowance allocation adjustment factor; it is not designed to overturn the entire rule.

We remain concerned about the effects of the allowance allocation provision on Pennsylvania coal and jobs. We have always agreed with DEP that this facet of the federal rule - requiring more stringent standards for bituminous coal mined in the east - puts Pennsylvania coal at a competitive disadvantage. However, we strongly believe that we'll prevail in court.

In the meantime, PCA has maintained its support of the federal rule's other provisions, and particularly its program of interstate allowance trading and banking.

PCA has not and does not support a state regulation. Our view sharply differs with the Department's contention that its proposal encourages use of Pennsylvania coal and protects coal jobs. Despite our repeated requests, the Department has not done any type of analysis to substantiate its claim.

On the contrary, the ban on trading and banking is a prescription for retirement of aging coal plants and the 100 percent bituminous compliance presumption may, at best, be an illusion and, at worse, an inducement for Pennsylvania's EGUs to burn bituminous coal mined outside the Commonwealth.

Our opposition to DEP's proposed regulation is based on a number of factors, all relating to our objective to preserve, to the maximum extent possible, mining jobs and Pennsylvania coal's share of the electric generation market. These factors include 1) the proposal's prohibition of allowance trading and banking, 2) its preference for using 100 percent bituminous coal (not exclusively Pennsylvania coal and, given the high level of mercury in our coal, a potential inducement to use coal produced in other states), and 3) the fact that mercury control technology using high sulfur bituminous coal is not available for full-scale commercial use to meet the regulation's stringent limits and accelerated compliance deadline.

## Trading

Critics of trading are wrong to assert there are no guarantees that Pennsylvania will see any significant reductions in mercury emissions if utilities are allowed to purchase allowances from out of state.

The mercury removal achieved as a cobenefit of SO<sub>x</sub> and NO<sub>x</sub> control equipment installed for utility compliance with the Clean Air Interstate Rule (CAIR) will result in dramatic mercury emissions reduction. According to DEP's own estimates, 90 percent of Pennsylvania's generating capacity is expected to have some type of CAIR control technology by 2015.

Indeed, DEP officials have claimed repeatedly that their proposed state regulation does not mandate any mercury-specific controls, saying utilities will be able to meet the state specific standards without using technology beyond what is used to comply with CAIR.

Electric utilities, who are by far our largest customers, have told us repeatedly and unequivocally that without a mercury trading and banking program, their options to comply with the state regulatory mandate would be 1) prematurely retire those older, smaller coal-fueled power plants in which investments in control technologies would be uneconomic, and/or 2) switch to bituminous coal with a lower mercury content mined outside the state. Both options, obviously, would result in significant disruptions to coal markets and jobs.

The power plants that are most at risk to forced shutdowns without trading are less than 250 megawatts in size and have been in service for over forty years. These thirty units represent 4,100 megawatts or about 21 percent of Pennsylvania's total coal-fired capacity.

The loss of this capacity will obviously disrupt Pennsylvania coal production and jobs and have an impact on retail electricity prices and expenditures across all sectors – residential, industrial and commercial.

#### 100 Percent Bituminous Preference

PCA does not agree with the Department that the preference in its proposal for use of 100 percent bituminous coal will preserve Pennsylvania coals' share of the utility market and protect its mining jobs. Instead, because Pennsylvania coals are comparatively high in mercury and recognizing that bituminous coal is not just produced in Pennsylvania but is also mined in about thirteen other states east of the Mississippi, PCA is concerned that the preference could have the unintended consequence of inducing Pennsylvania's EGUs to buy bituminous coal mined outside the state.

Attachment II to my testimony is a chart that provides a statistical distribution of coal mercury content by state for the major producing states in the east and also some in the west. It shows that Pennsylvania coals have on average the highest mercury concentration measured in pounds per trillion BTUs of all coals in the eastern United States and twice as much on average as coals produced in West Virginia and Kentucky.

The Department's attempt to impose its own mercury regulation with a preference for bituminous coal combined with the mandated SO<sub>2</sub> and NO<sub>x</sub> emissions required under CAIR, may force electric utilities to move towards bituminous coals that are lower in mercury and sulfur content. Those coals just happen to be plentifully available in West Virginia and eastern Kentucky.

The 100 percent bituminous preference may not even be a benefit that utilities can use in a meaningful way.

Under the Department's proposal, each EGU is required to meet an annual emission limit or cap (i.e. ounces of mercury emitted by the unit) as well as an emission standard (the 80 and 90 percent mercury reduction requirement).

The compliance presumption applies only to the emission standard – i.e., if the unit burns 100 percent bituminous coal and installs certain control technologies, it is presumed to be in compliance only with the emission standard.

However, the unit must also comply with the emission cap. If it exceeds its cap but is presumed to be in compliance with the emission standard, the utility may petition DEP for additional mercury allowances to meet its cap from a supposed surplus allowance pool managed by the Department. These allowances essentially will come from units that overcomply. Allowances are awarded on a priority basis, essentially from a unit with the most "controls" to a unit with the least "controls."

The problem with this scenario is that there is no guarantee that there will be excess allowances available in the pool. If that happens then, conceivably, an EGU could be presumed to be in compliance with the state emission standard but, by not meeting its cap, be in violation of the federal cap. We asked the DEP on several occasions to share with us the details of the modeling they did to support their contention that a surplus pool would exist, but they failed to provide a timely and adequate response.

#### Status of Technology

Mercury specific control technology, particularly its use with high sulfur eastern bituminous coals, is still a work in progress.

Only four out of the 19 full-scale tests to date were conducted using high-sulfur bituminous coal and only two of 15 scheduled tests will use this type of coal. And, the preliminary results of the test cases that used high-sulfur coal found the technology to perform more poorly than with western subbituminous coals.

DOE, in clarifying its perspective on the status of mercury control technologies said that, "there remain a number of critical technical and cost issues that need to be resolved through additional research before mercury control technologies can be considered commercially available for all U.S. coals and the different coal-fired power plant configurations in operation in the United States."

Based on these comments, PCA supports the state legislation – SB1201 and HB2610 – to preclude adoption of a state mercury regulation that would inevitably lead to a dramatic loss of Pennsylvania coal production and jobs. While this result would give us the very strict federal program for controlling utility mercury emissions that includes the allowance allocation formula, this option would better preserve our markets and jobs going forward than the proposed state regulation, while still preserving our opportunity to challenge the allocation provision in federal court.

Thank you for the opportunity to provide PCA's comments on this very critical issue. I will be happy to respond to any questions.