



**Testimony of
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**Communicated to the
Committee on Environmental Resources and Energy
of the
Pennsylvania House of Representatives**

**Regarding the
Clean Power Plan Proposed Rule
(Carbon Pollution Guidelines for Existing Power Plants:
Emission Guidelines for Greenhouse Gas Emissions from Existing Stationary Sources:
Electric Utility Generating Units)
of the
United States Environmental Protection Agency
(Federal Docket ID No. EPA-HQ-OAR-2013-0602)**

**Capitol Building
Commonwealth of Pennsylvania
Harrisburg, Pennsylvania**

September 16, 2014

Chairman Miller, Chairman Vitali, I thank you and the Committee for your work here today. I understand that although the hearing roster is full, written comments such as these are welcome for the record.

I am Kevin Stewart and I serve as Director of Environmental Health for the American Lung Association in Pennsylvania. I represent not only over one-and-a-half million people in the Commonwealth who suffer from chronic lung disease, but also the millions more who desire to breathe clean air and so protect their good health.

We have supported the Environmental Protection Agency's efforts to set strong carbon pollution standards for new power plants. We have likewise looked forward to EPA's establishment of similar standards for existing power plants.

There are standards, and properly so, for air toxics, acid gases, heavy metals, smog-forming and soot-forming emissions from power plants, and there is no excuse for there not to be standards for carbon pollution as well. Anything less shortchanges our health and our children's health.

Health concerns

I write to remind everyone of *why* we need strong controls on carbon pollution and on air pollution in general: Reducing carbon pollution will help protect public health.

Carbon pollution results in higher temperatures that enhance the conditions for ozone (smog) formation. Even with the steps that are in place to reduce smog, increasing temperatures are likely to increase the risk of unhealthy smog levels in large parts of the United States, and to lengthen the ozone season. Indeed, as the American Lung Association's *State of the Air* report (April, 2014) recently demonstrated by showing an increase in the three-year average number of days of unhealthy ozone at nearly every monitor in our service area compared with last year's report, we cannot rest assured that ozone levels will always continue to diminish.

In addition, just as the *National Climate Assessment* (May, 2014) does not limit its concerns to the direct effects of temperature on smog formation, the Lung Association also recognizes other consequences:

- Higher temperatures result in increased energy production and electricity use—e.g., for air conditioning—and in increased emissions of fine particles and their precursors.
- Pollen and mold spore production increase. These are known to act synergistically with ozone and other pollutants to exacerbate asthma and allergies.
- Increased carbon dioxide levels promote the growth of plants and hence result in the production of more ozone precursors.
- The risk of wildfires and their pollution increases.
- Vector-borne diseases show evidence of doing so.
- The potential for severe weather events increases. In our service area, Superstorm Sandy resulted in mold and health problems in tens of thousands of homes that people experience to this day.

Benefits of the rule

While EPA makes clear that “the primary goal of the proposed guidelines is to reduce emissions of CO₂,” by 2030, according to its *Regulatory Impact Analysis* (June, 2014), not only do the climate benefits alone from CO₂ reductions amount to about \$30 billion (\$US2011) annually (discounted at the 3 percent discount rate in the federal *Social Costs of Carbon* analysis (Nov., 2013), on which rate the government has centered its attention), but also the corresponding health co-benefits are valued at on the order of up to two times as much as the climate benefit portion.

Furthermore, the annual total benefits by 2030 accrue to a factor ranging between 6.6 and 12.2 times the accompanying compliance costs (again, presuming a three percent discount rate). And

this ratio is calculated without monetizing and including the potentially significant benefits such as those that result from reduced environmental exposure to sulfur dioxide, nitrogen dioxide, mercury, and hydrochloric acid.

Moreover, according to the *Co-Benefits of Carbon Standards* report by Syracuse and Harvard Universities (May, 2014), “with a strong carbon standard, air quality and atmospheric deposition improvements would be widespread with every state receiving some benefit. The greatest improvements are projected for states in and around the Ohio River Valley as well as the Rocky Mountain region.” Indeed, model results consistently show air quality improvements in western Pennsylvania projected to occur under this rule to be among the largest in the country.

Stronger targets

While the American Lung Association supports the Clean Power Plan, we find that some improvements in its Best System of Emission Reduction (BSER) formulas would strengthen it:

- The more that energy efficiency and renewable energy generation displace the generation from the dirtiest fossil fuels, greater emissions reductions would result than EPA has assumed, so the BSER targets should be set higher.
- Many emission reduction measures are already occurring in the states, so the formulas need to account for that. For example:
 - States’ energy efficiency measures are already demonstrating a higher energy savings rate (over 2%) than is recognized in the targets (1.5%).
 - Utilities have already planned replacements of old, high-emitting plants with lower-emitting resources; those changes are not fully recognized in the formula.
 - The formula does not account for the emissions from new natural gas plants currently planned. (Though included as a way to comply, their additional emissions are not factored into the formula for the targets themselves.)
- With the caution that there are several reasons for excluding biomass combustion from the menu of clean alternative energy sources, base the inclusion of a wide variety of clean renewable generation in the formulas on resource availability rather than limited to currently mandated levels.
- Include opportunities for transmission and distribution efficiency improvements.

The bottom line is this:

EPA must make certain that its standards do not simply tally reductions that would have been achieved even had the Clean Power Plan not been in place. I must stress: We are in the midst of a slow-motion crisis of global proportions. It is, to be sure, irregular and intermittent in its progression. As a result, many are apt to deceive themselves and others about the necessity for serious action. But the crisis is real and on the scale of decades it is inexorable, so the objective here must not be one of doing the minimum necessary to meet some arithmetic goal, but rather one of finding ways to do as much as possible to reduce the severity of the impacts already on their way.

Indeed, as the President’s Council of Economic Advisers recently underscored in its report *The Cost of Delaying Action to Stem Climate Change* (July, 2014), “An analysis of research on the

cost of delay for hitting a specified climate target (typically, a given concentration of greenhouse gases) suggests that net mitigation costs increase, on average, by approximately 40 percent for each decade of delay. These costs are higher for more aggressive climate goals: each year of delay means more CO₂ emissions, so it becomes increasingly difficult, or even infeasible, to hit a climate target that is likely to yield only moderate temperature increases.”

People at risk

I conclude by recounting that people at special risk of sickness or even death from air pollution include infants, children, the elderly, persons with asthma or COPD, those who are immune-compromised, and people in indigent and minority communities.

We emphasize that these populations are not a small minority of particularly sensitive persons, but in the service territory of the American Lung Association in Pennsylvania are constituted of groups containing hundreds of thousands or even millions of individuals. They include the following:

- 2.7 million infants, children and teens under 18
- 2 million persons aged 65 and above
- 285,000 children with asthma
- 1 million adults with asthma
- 667,000 adults with chronic obstructive pulmonary disease (COPD)
- 916,000 persons with cardiovascular disease
(not even counting those with only hypertension)
- 1 million persons with diabetes, and
- 1.7 million persons living in poverty.
- Pregnant women, their developing unborn, persons who work or exercise outdoors, and many others with existing health problems are also at risk.

Indeed, far from being a small minority, persons falling into one or more of these high risk groups together compose more than half the population. And even more important to remember: These are not faceless numbers ... Every one of these millions is a real person, not a nameless statistic. Every one of these people is a human being worthy of our protection – a neighbor, a coworker, a friend, a family member, maybe even yourself.

The American Lung Association’s mission is *to save lives by improving lung health and preventing lung disease*. Let’s get about the business of saving some lives.