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December 18, 2015

Terry L. O'Clair, P.E.  
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Director O'Clair:

On behalf of the American Thoracic Society (ATS) and its members in North Dakota, we greatly appreciate the opportunity to comment on North Dakota's efforts to develop a state implementation program in response to the EPA Clean Power Plan. The ATS is a medical professional organization with more than 15,000 members who are dedicated to the prevention, detection, diagnosis, treatment, cure and research of respiratory disease, critical care illness and sleep disordered breathing. Because air quality has a direct impact on the health of the patients we serve, the ATS has a compelling interest in how state compliance with the Clean Power Plan will affect the patients we serve.

### **Climate Change and Public Health**

The evidence documenting climate change and the urgent need to respond is consistent, compelling and comprehensive. While it is not our intent to provide an exhaustive list of references documenting the reality of climate change and its adverse human health effects, we have concluded that sufficient documentation of the cause and scope of the challenge posed by climate change can be found in the 4<sup>th</sup> IPCC report, the US National Climate Change Assessment and the Lancet Report on climate change. In addition, as documented below, surveys of our own members, who include respiratory physicians and scientists, overwhelmingly indicate that they are already seeing the human health effects of climate change in their practices. Collectively, these documents provide a compelling outline of facts that document that climate change is occurring and that it will have significant negative public health effects today, absent policy action, and will continue to have even more disruptive public health impacts in future years.

Moreover, implementation of the Clean Power Plan provides an opportunity not just to avoid global climate change effects, but also to immediately improve local public health by achieving cleaner air.

### **Climate Change is a Public Health Issue**

The ATS is pleased that the North Dakota Department of Public Health, Division of Air Quality, has been charged with responding to EPA's Clean Power Plan. We believe that public health is proper frame to view both the challenge and opportunity posed by the Clean Power Plan. Research has shown that climate change is already having an impact on health today. Pollen seasons start earlier, are longer and are more intense; climate-forced heat waves are happening more frequently and lead to premature mortality; storm intensity is increasing leading to both injury and death. Climate-forced droughts are leading to water scarcity issues and promoting forest fires. Forest fires lead to both enormous property damage and loss of life and create large plumes of air pollution that impact both local and regional air quality.

These health effects are not speculative. Surveys of physicians in the U.S. show that clinicians are seeing the health effects of climate change in their patients. In fact a recent survey of U.S. ATS member found:

- 89% of respondents accept that climate change is happening;
- 68% agree that climate change is being driven entirely or mostly by human activity;
- 65% confirm that climate change is relevant to direct patient care; and
- Free text responses indicate physicians are seeing climate change health effects in patients today.

### **Climate Change and Co-Benefits**

Reducing carbon pollution from power plants will have local and immediate clean air public health benefits and will at the same time lead to reductions in other air pollutants, such as ozone and particulate matter. Ozone, particulate matter and other air pollutants associated with oil, coal and natural gas fired power plants have documented adverse respiratory and cardiac health effects, including increased risk of hospital admissions and death. Whether North Dakota adopts improvements in power plant efficiency (block 1), switching from coal to natural gas power plants (block 2), expansion of alternative renewal fuel sources (block 3), state based initiatives (consumer energy efficiency improvements) or a blend of all these options, North Dakota residents will benefit from reductions in fossil fuel air pollution emissions. In fact, EPA estimates that for every \$1 dollar invested in reducing carbon pollution emissions, American families will enjoy \$4 in health benefits. That is an impressive health "payback" for going forward with the Clean Power Plan implementation, especially if coal combustion is reduced as a part of the implementation.

### **Coordinate with Other States to Maximize Health Benefits**

In addition to encouraging the use of a public health framework in making decisions under the Clean Power Plan, we also would encourage coordination with other states in developing a regional plan that maximizes public health benefits. The co-benefits of taking action within North Dakota to reduce carbon pollution will extend beyond state boundaries. In the absence of a regional plan, these health co-benefits may not be fully considered.

By working with neighboring states, health benefits of regional action can be more fully considered and realized at a lower cost than if state only plans are enacted.

### **Seek Input from the Physician Community**

As North Dakota begins developing its Clean Power Plan implementation plans, we strongly urge you to actively seek the input of the physician community. Many physicians, particularly those engaged in research on the health effects of air pollution, can provide valuable assistance in understanding community, regional and national health impacts of reductions in carbon and other co-pollutants. Physician groups can also be helpful in explaining to the public why state-based Clean Power Plans are important tools to improve public health.

### **Beware the Lure of Biomass Fuels**

One of the many topics that will accompany the state planning effort to reduce carbon emissions from power plants will be the role of alternative energy sources, such as wind, solar, geothermal, nuclear and biomass. Each energy source has strengths and weaknesses. However, the ATS is concerned that the potential respiratory health damage drawbacks of biomass fuels are not fully appreciated by the public and policy makers. Burning of biomass fuels will likely increase dangerous pollutants such as particulate matter and ozone. We urge state planners to proceed cautiously when considering biomass fuel sources vs. other cleaner alternative energy sources.

With these comments as background, the ATS offers the following specific comments:

General Questions

### **Issues for Public Comment 111(d) Plan Development**

The North Dakota Department (Department) is soliciting comments on the following issues as well as any other issues that are pertinent to the plan development:

General Questions:

#### **1) Should the Department develop a plan? If yes, should it be a “State only” plan or a regional plan?**

We believe North Dakota should proceed with developing its own state plan, but should explore opportunities to coordinate with neighboring states. Coordinating with neighboring states will allow North Dakota and regional states to achieve maximal carbon emissions reductions at minimal costs.

#### **2) To what extent should the Department develop a plan?**

- Only improvements at the power plant (inside the fence line)
- Complete plan as outlined by EPA
- Something in-between

We continue to believe that the North Dakota Department of Public Health, Division of Air Quality has the expertise and public health mindset to best develop a state plan to comply with the EPA Clean Power Plan requirements. We would encourage North Dakota to consider all three building blocks, as well as other state initiatives and consumer energy efficiencies to develop a state plan.

**6) Suggestions for cost-effective carbon dioxide reductions.**

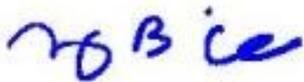
In addition to considering each of the 3 building blocks to meet the North Dakota targets under the Clean Power Plan, the ATS recommends North Dakota consider consumer energy efficiency improvements as a cost effective strategy to reduce carbon emissions reductions. In addition, it is important to maximize the health co-benefits to the state in the process of evaluating the cost-effectiveness of measures. As discussed above, these local and immediate health co-benefits can far exceed the cost of emissions reductions, if fossil fuel combustion decreases also result from the carbon reductions.

The ATS hopes these comments are useful as the Department considers how to respond to the requirements of the EPA Clean Power Plan. The ATS looks forward to working with the North Dakota Department of Public Health, Air Quality Division to develop a meaningful state plan under the Clean Power Plan.

Sincerely,



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American Thoracic Society



Mary B. Rice, MD  
Vice Chair, ATS Environmental Health Policy Committee  
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