Comments of Matt Walker Community Outreach Director Clean Air Council

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Pennsylvania's Implementation of the EPA's Clean Power Plan

My name is Matt Walker and I'm the Community Outreach Director with Clean Air Council. The Council is a non-profit environmental organization headquartered in Philadelphia. The Council has over 8,000 members throughout Pennsylvania, New Jersey, and Delaware. For more than 40 years, the Council has fought to improve air quality across the region and protect everyone's right to breathe clean air. Thank you for the opportunity to address Pennsylvania's perspective on the Clean Power Plan.

Clean Air Council supports the Environmental Protection Agency's (EPA) historic pollution reduction standards that limit the amount of carbon existing power plants can emit into the air. Climate change is here now and it is having devastating impacts in our communities. The cost of further delay is too high for Pennsylvania's taxpayers. Pennsylvania's three wettest years ever have all occurred during the 21st century¹, putting Pennsylvania third in the country in flood-related automobile damages.² Since the Industrial Revolution, sea level has risen an average of 8 inches and continues to rise at an increasing rate, causing increasing damages.³ The Southeastern Pennsylvania Transportation Authority just secured a much-needed \$87 million in taxpayer dollars to repair damage incurred during Hurricane Sandy. The Susquehanna River Basin now incurs an average of \$150 million in flood damages every year⁴. Storms like Superstorm Sandy are more likely with climate change and are exacerbated by rising sea levels. DEP must take these real economic impacts seriously and take strong action on limited greenhouse gases.

There is no more serious public health, environmental justice and economic development threat than climate change. Pennsylvania leaders need to stop denying climate change and start accepting that using coal for electricity for almost 250 years has caused major impacts on the health of Pennsylvanians and downwind residents. Coal pollutes our air, water and land, and is largely responsible for global climate change. EPA scientists predict that warmer temperatures resulting from climate change will cause an increased number of bad ozone days. Pennsylvania

¹ http://thedemocraticdaily.com/2014/06/21/scientists-predict-increased-rain-floods-northeast/

² http://www.carfax.com/used-car-buying-guide/flood-damage

³ http://oceanservice.noaa.gov/facts/sealevel.html

⁴ http://www.casey.senate.gov/newsroom/releases/casey-calls-for-funding-for-life-saving-flood-forecastingsystem

counties had a combined 485 dangerous ozone days in 2013. Ground-level ozone is linked with many respiratory diseases, cancer, stroke and premature death.

Yet Pennsylvania DEP seems determined to squander this unique opportunity to address carbon emissions. This April DEP published a draft carbon rule implementation white paper that was short sighted, unambitious and will not be approved by EPA. The paper included ideas for exemptions to the 111(d) program for certain electric generating sources such as coal waste and waste to energy facilities. While PA DEP states that the emissions reduction goals in the U.S. Environmental Protection Agency's proposed rule are achievable with "inside the fence-line" reductions.5 the Council believes that PA DEP's ideas for implementing the plan as it stands will simply not be enough for reducing carbon pollution. EPA set reasonable goals for Pennsylvania to create a cleaner and healthier power grid that is more reliant on clean sources of energy and less reliant on large coal-burning power plants. EPA's approach requires a level of emission reduction that is technically achievable, cost effective and protective of public health. DEP needs to stop further delay and work with all Pennsylvania stakeholders to develop a plan that reduces greenhouse gases by prioritizing the switch from using almost all fossil fuels to using as much renewable energy and energy efficiency as possible. The longer the state waits to develop a serious carbon reduction plan, the harder it will be to construct a plan that makes sense for Pennsylvania's future. If DEP continues to delay, or insists on developing a plan that EPA can not approve, then EPA will simply impose a solution on Pennsylvania.

Contrary to the claims of Governor Corbett and DEP, there is nothing in section 111(d) of the Clean Air Act that prohibits the use of "outside the fence" efficiency and renewable energy measures to reduce the amount of carbon-intensive fuels needed to power Pennsylvania's economy. EPA's four building blocks clearly support the idea of states using innovative policy solutions beyond power plant boundaries to comply with the reduction targets.

Now is not the time to merely phase out one fossil fuel (coal) just to promote the use of another fossil fuel (natural gas) for power generation. While the market is already pushing Pennsylvania's fleet of old power plants to be pushed aside by newer natural gas plants, the Council strongly advises DEP to develop a plan that maximizes curbing pollution from power plants while advancing energy efficiency and renewable energy to meet the standards. If the ultimate goal of DEP's implementation of the Clean Power Plan is to curb the effects of climate change, then DEP must recognize the significant climate impacts of methane that would result from coal fired power plants converting to gas or from new gas power plants, especially if Pennsylvania does fully address methane leaks from the gas industry. The Intergovernmental Panel on Climate Change recently reported that methane is 86 times more potent at warming our

⁵http://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/Climate%20C hange%20Advisory%20Committee/Sep 16 2014/7 31 Written Testimony of VB on EPA Section 111%28d%29 .pdf

planet than carbon over a twenty year time period, while research by a NASA scientist shows that methane is 105 times more potent when including aerosol effects.

In the past, Pennsylvania pioneered coal, oil and natural gas. We now have the opportunity to be pioneers again – this time by innovating in energy efficiency, and non-polluting energy sources such as wind, solar, geothermal and small hydropower. Complying with the EPA's carbon limit will not require an end to fossil fuels or the adoption of cost prohibitive carbon capture and sequestration technology. Pennsylvania must be merely willing to do more to conserve energy and encourage innovation in renewable sources.

Energy efficiency is the cheapest and fastest way to cut emissions and should be a prominent part of Pennsylvania's implementation of 111(d). Residential and commercial buildings consume 49.8% of Pennsylvania's energy and it is embarrassing that the Pennsylvania Department of Environmental Protection (DEP) does not consider this rule an opportunity to conserve energy, limit pollution and promote safe jobs in efficient construction and retrofitting. Seizing such an opportunity comes with challenges, one of the most significant of which is the difficulty of adequately and accurately quantifying reductions in carbon emissions achieved by energy efficiency measures and renewables. PA DEP should incorporate credits for emissions reductions achieved through utility-wide programs, building code updates, updates to the state's electricity grid, and emissions offsets from the use of renewable energy sources into its implementation plan. In order to do so, the plan would need to include a clear, supportable, and consistent system for accounting for such reductions and applying appropriate credits. The groundwork has already been laid - over recent decades, at least fourteen states have developed protocols for quantifying such energy savings. Pennsylvania can and should do the same. Within the PJM Grid, the energy saved from increased efficiency practices has been growing steadily during the last few years. Gaining 100 MW from 2014 to 2015, 194.8 MW from 2015 to 2016 and then 221.7 MW during May's auction for the 2017-2018 year, energy efficiency now provides 1,339 MW, equivalent to more than two large coal-fired power plants like the Keystone Generation Station in western Pennsylvania. Several coal plants are scheduled to close within the next five years and in May the PJM grid chose not to pick up the Bruce Mansfield power plant for the 2017-2018 year.8 In 2011, Bruce Mansfield created 6.6% of the state's carbon dioxide emissions and now the PJM grid has decided that its energy is no longer needed.9 This proves that Pennsylvania can in fact increasingly meet energy demand using fewer fossil fuels and more energy efficiency and renewables.

http://www.eia.gov/state/?sid=PA#tabs-2

¹ http://energyefficiencymarkets.com/energy-efficiency-demand-response-pim-capacity-auction/

⁸ http://www.bizjournals.com/pittsburgh/news/2014/08/05/firstenergy-defers-capital-projects-at-two-plants.html

http://ghgdata.epa.gov/ghgp/service/html/2011?id=1006909

The Council also believes DEP should focus significantly more attention on EPA's option for using renewable energy deployment to comply with the standards. If you don't count the waste incineration and fossil fuels such as coal waste, which is allowed under Pennsylvania's AEPS, the current requirement is only 8% renewable energy by 2021. This is embarrassing, particularly for a state that at one time was at the forefront of wind and solar energy development and installation. DEP must do everything in its power to encourage increasing the Commonwealth's Alternative Energy Portfolio Standards (AEPS). Pennsylvania could advance renewable energy quickly by offering incentives and increasing the percentage in Pennsylvania to at least 25% by 2022 without raising requirements for Tier 2 alternative fuels. This requirement would be conservative compared to more progressive Renewable Portfolio Standards such as New York, which set a 30% goal for 2015. Pennsylvania currently only takes advantage of less than a third of its wind-generation capacity of 4,000 MW available, which would power over a million homes. Just a few years ago, Pennsylvania employed 4,000 people to build, install and maintain wind turbines. Pennsylvania's two turbine manufacturing plants in Cambria and Bucks Counties are now closed due to the lack of supportive policies. While American solar jobs increased by 20% in 2013, Pennsylvania lost 1,100 solar jobs, more than a quarter of our market.

Lastly, DEP should include safeguards in their implementation plan to protect environmental justice communities living near power plants that may be subjected to disproportionate health impacts from power plants that do not undergo upgrades.

The Council urges the DEP to see the damages of climate change at face value and to set increasingly stringent standards for coal plants while encouraging clean renewable energy and energy efficiency solutions. DEP should view the proposed limit on carbon dioxide pollution as an opportunity to benefit public health and create a vibrant economy for Pennsylvania.