U.S. Environmental Protection Agency

Public Hearing on Proposed Rule:
"Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program"

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Testimony of Gavin G. McCabe
Special Assistant Attorney General
Environmental Protection Bureau
Office of New York State Attorney General
Barbara D. Underwood

Written Testimony of Gavin G. McCabe on
EPA's Proposed Replacement of the Clean Power Plan

I am pleased to testify on behalf of New York State Attorney General Barbara D. Underwood on the critical issue of EPA's responsibility to limit carbon pollution from power plants under the Clean Air Act. The New York Attorney General's office has been advocating for 15 years for nationwide emission limits on this pollution, including most recently leading two dozen states and cities defending the Clean Power Plan in court. Our office will be submitting more detailed written comments, but I'm here today to emphasize a few key reasons why we believe the proposed rule is wrong both as a matter of policy and as a matter of law.

EPA issued the Clean Power Plan under Clean Air Act section 111, a provision of the law the Supreme Court said "speaks directly" to limiting carbon dioxide from power plants.[1] In section 111, Congress directed EPA to require that large stationary sources—like power plants—control their air pollution that endangers public health and welfare. Under EPA oversight, states design plans to require existing sources apply the best system of emission reduction to limit that pollution. The Clean Power Plan is well grounded in the law and the science. By contrast, EPA's proposed replacement rule would not satisfy the agency's statutory obligation to address power plant carbon pollution that EPA found is endangering public health and welfare.

In my brief remarks today I will focus on two problems with EPA's proposed replacement, the so-called "ACE rule": First, it is not up to the critical task of substantially cutting carbon pollution from fossil-fueled power plants and will lead to unacceptable backsliding on air quality. Even accepting EPA's own comparison to the Clean Power Plan at face value, the proposed rule will increase emissions of both greenhouse gasses and criteria pollutants and will lead to up to 1,400 premature deaths. Second, the proposed replacement completely ignores proven ways of reducing carbon dioxide emissions, such as the Regional Greenhouse Gas Initiative, representing a huge missed opportunity to build on the States' leadership and innovative efforts to date. With the devastating impacts of climate change revealing themselves on an almost daily basis, now is not the time for EPA to put on blinders and tie its own hands. We urge EPA to abandon this inadequate, ill-informed proposal and return to a leadership role in combatting the

[1] *American Elec. Power Co. v. Connecticut*, 564 U.S. 410, 424 (2011)

gravest environmental problem of our times. But, along with our state and city partners, we stand ready to fight this proposal if finalized.

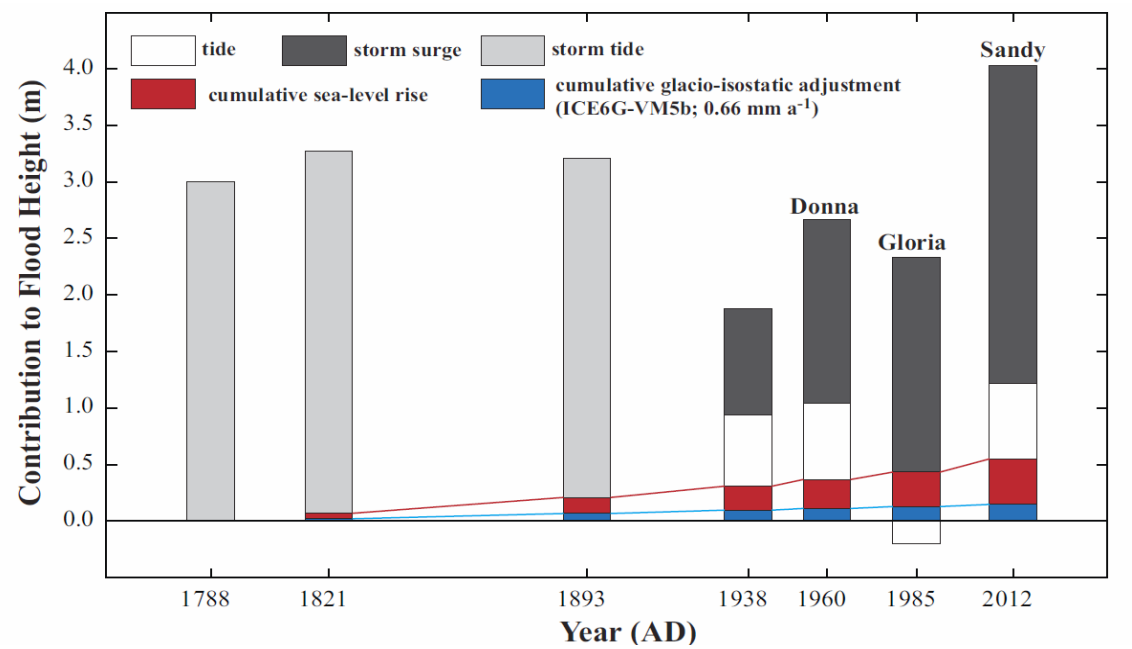
Before discussing those two problems in more detail, I first wanted to raise a concern about the rulemaking process. EPA has not responded to the attached letter from New York and 27 other states and cities requesting additional time for public comment and additional public hearings in other parts of the country. A 60-day public comment period and one public hearing is patently insufficient on this critical issue and pales in comparison to the extensive outreach EPA made during the Clean Power Plan rulemaking. We urge EPA to extend and broaden the process so that all stakeholders can have a full and fair opportunity to participate in this highly consequential proceeding.

Now, regarding some of the problems with the ACE rule. First, it is not up to the critical task of significantly cutting carbon pollution from power plants. EPA found nearly a decade ago that carbon pollution endangers public health and welfare. Since that time, the evidence has only grown stronger that climate change is occurring and that urgent action is needed to limit the pollution causing ever-worsening harms.

In New York, we're experiencing the impacts of increasing climate change, three of which I'll mention:

- ***Flooding worsened by sea level rise***. The twelve inches of sea level rise New York City has experienced in the past century exacerbated the flooding caused by Hurricane Sandy by about twenty-five square miles, damaging the homes of an additional 80,000 people in the New York City area alone.[2] The figure below shows the increasing influence that sea level rise has had on the flood heights in New York City associated with historical hurricanes.

[2] New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms. Ann. N.Y. Acad. Sci. ISSN 0077-8923, available at: http://onlinelibrary.wiley.com/doi/10.1111/nyas.12593/full



Estimated Contribution to Flood Heights in New York City for Notable Historical Hurricanes

Source: Kemp et al. (2013), Contribution of relative sea-level rise to historical hurricane flooding in New York City, *Journal of Quaternary Science 28(6), 537-541.*

All told, the Hurricane Sandy killed 43 people, caused more than 600,000 homes to lose power, left 20,000 people homeless, closed 40 schools for the remainder of the year, flooded 17% of the city's total land mass, and damaged $19 billion worth of public and private property in NYC.[3]

- ***More extreme storms.*** The increase in extreme rainfall already being observed across New York is consistent with scientists' predictions of the alteration of historical weather patterns resulting from climate change. In 2014, our office released a report, Current and Future Trends in Extreme Rainfall Across New York State,[4] which highlights dramatic increases in the frequency and intensity of extreme rain storms across New York.

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[3] Miller, Stephanie, Gurian, Patrick, Daley, Jad, Bostrom, Holly, Matsil, Marc, and Montato, Franco. 2016. *Did NYC's Coastal Green Infrastructure Protect Property During Hurricane Sandy? A Case Study Of Three Coastal Communities*. Prepared for the Trust for Public Land by Desxel University. March.

[4] *Current & Future Trends in Extreme Rainfall Across New York State, A Report from the Environmental Protection Bureau of New York State Attorney General Eric T. Schneiderman* (Sept. 2014) (based on data from the 2014 National Climate Assessment and the National Oceanographic and Atmospheric Administration's Northeast Regional Climate Center), available at: https://ag.ny.gov/pdfs/Extreme_Precipitation_Report%209%202%2014.pdf

For example, in 2011, Hurricane Irene dropped more than 11 inches of rain in just 24 hours, causing catastrophic flooding in the Hudson Valley, eastern Adirondacks, Catskills and Champlain Valley. Thirty-one counties were declared disaster areas. Over one million people were left without power, more than 33,000 had to seek disaster assistance, and 10 were killed. Damage estimates totaled $1.3 billion.

Hurricane Irene Flooding

Image from ABC 7 Eyewitness News

Similarly, in August 2014, a weather front stalled over Long Island, dumping more than 13½ inches of rain—nearly an entire summer's worth—in a matter of hours and breaking the state's rainfall record. That deluge flooded out over 1,000 homes and businesses, opened massive sinkholes on area roadways, and forced hundreds to evacuate to safer ground. Initial damage estimates exceeded $30 million.

Historic Long Island Flash Flooding

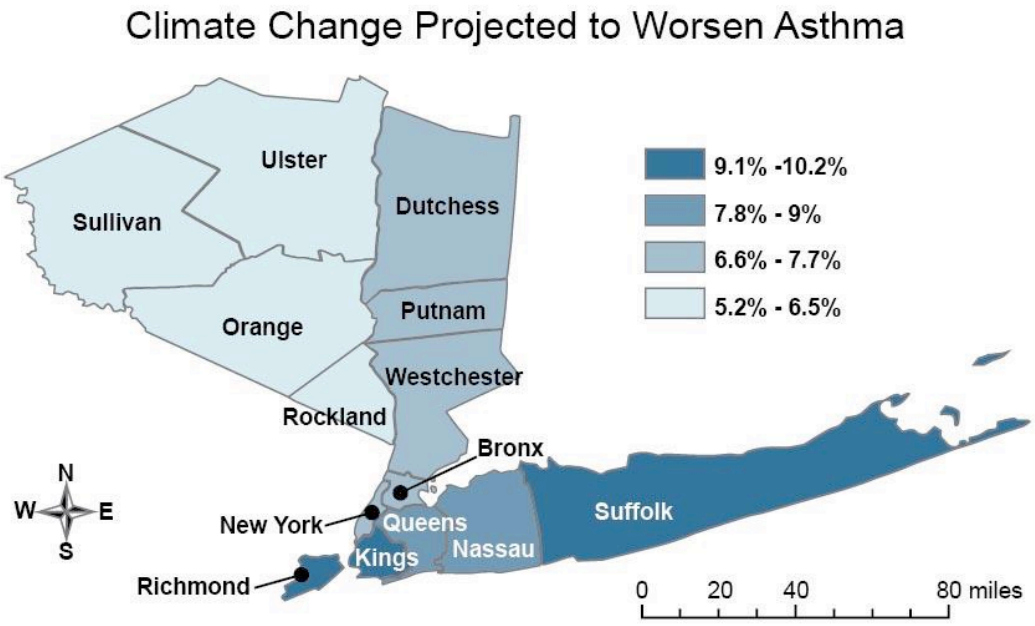
Image from NYTimes (Andrew Theodorakis/Getty Images)

- ***More premature deaths and asthma attacks from smog.*** Although New York and EPA have taken a number of actions to reduce pollutants such as nitrogen oxides and volatile organic compounds that contribute to ground level ozone (smog) formation, ozone pollution remains a persistent problem. According to the American Lung Association, 9.4 million New Yorkers – almost 50 percent of the state's population – live in counties that have unhealthy levels of smog.[5] . A significant amount of the pollutants that contribute to smog is generated in upwind states and carried by prevailing winds into New York and other northeastern states.

  As the climate warms, increased temperatures create more favorable conditions for the formation of smog. According to the Third National Assessment on Climate Change, for example, under a scenario in which greenhouse gases continue to increase, this would lead to higher ozone concentrations in the New York metropolitan region, driving up the number of ozone-related emergency room visits for asthma in the area by 7.3 percent--more than 50 additional ozone-related emergency room visits per year in the 2020s, compared to the 1990s.[6] The figure below, included in that report, shows that projected worsening in asthma cases in the New York City area.

[5] American Lung Association. *State of the Air 2018*. Available at: http://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2018-full.pdf.

[6] U.S. Global Change Research Program, *2014 Third National Assessment on Climate Change*, at 222 (citing Sheffield, P. E., J. L. Carr, P. L. Kinney, and K. Knowlton, 2011: Modeling of regional climate change effects on ground level ozone and childhood asthma. American Journal of Preventive Medicine, 41, 251-257, available at http://download.journals.elsevierhealth.com/pdfs/journals/0749-3797/PIIS0749379711003461.pdf)



Power plants account for 28 percent of U.S. greenhouse gases, second only to the transportation sector in their contribution to the pollution that drives destructive climate change.[7] Two years ago, EPA told the D.C. Circuit that "[n]o serious effort to address the monumental problem of climate change can succeed without meaningfully limiting [power] plants' CO_2 emissions."[8] The ACE rule fails that test.

EPA's own analysis forecasts that compared to the Clean Power Plan, carbon dioxide emissions under the ACE rule would be significantly higher under each of the three policy scenarios it considered—over 100 million tons greater in 2030. *See* EPA, Regulatory Impact Analysis (RIA) at ES-7, ES-8, Table ES-5 (power sector emissions under ACE rule) and 3-40, Table 3-41 (power sector emissions under the Clean Power Plan implemented as contemplated in the 2015 RIA). EPA concedes the ACE rule would result in increased hospital admissions due to respiratory illness, increased asthma-related emergency room visits, and exacerbation of asthma, and may result in over 1,000 more premature deaths per year by 2030 relative to the Clean Power Plan. *See* RIA at 4-33, Tbl. 4-6.

[7] https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

[8] EPA Final Brief in *West Virginia v. EPA*, D.C. Cir. No. 15-1363 (Doc. #1609995, filed April 22, 2016), at 61

To be sure, market trends toward cleaner electricity generation have accelerated since EPA finalized the Clean Power Plan. Many states are well on their way to meeting their 2030 emission reduction requirements. Armed with the knowledge that even more cost-effective emission reductions are possible, EPA should be focusing on how to strengthen the Clean Power Plan. The ACE rule fails miserably on that score. In addition, EPA's proposed weakening of the New Source Review program as part of the ACE rule to incentivize greater use of coal-fired power plants threatens to *increase* air pollution compared to a business-as-usual scenario.

A second major flaw in the ACE rule is that it ignores proven methods of reducing carbon pollution from the power sector. EPA based the Clean Power Plan in large part on state laws that successfully cut carbon pollution from power plants while keeping prices stable and maintaining reliability. For example, EPA cited the success of the Regional Greenhouse Gas Initiative (RGGI). Under RGGI, New York and nine other states have shown that substantial carbon pollution cuts from existing fossil fuel power plants are achievable by encouraging shifts to less carbon-intensive generation, increasing use of renewable energy, and reducing demand through energy efficiency.

RGGI has been an unqualified success. The participating states created a regional cap-and-invest system pursuant to which they limit carbon pollution from power plants and use the proceeds from auctioning emission allowances to invest in programs that reduce energy demand and keep down prices. Since RGGI launched in 2008, our states have succeeded in reducing CO_2 emissions from the power sector by more than 40 percent.[9] A 2015 report from the Nicholas Institute at Duke University found that RGGI was responsible for more reductions through 2014 than fuel switching to natural gas or the global economic downturn unrelated to RGGI.[10]

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[9] Acadia Center, Outpacing the Nation: RGGI's environmental and economic success (Sept. 2017) ("Acadia Ctr. 2017 Report"), at 3, available at http://acadiacenter.org/wp-content/uploads/2017/09/Acadia-Center_RGGI-Report_Outpacing-the-Nation.pdf

[10] Brian Murray and Peter Maniloff, *Why Have Greenhouse Emissions in RGGI States Declined? An Econometric Attribution to Economic, Energy Market, and Policy Factors*, Duke Nicholas Institute (Aug. 2015), publication available at: https://nicholasinstitute.duke.edu/environment/publications/why-have-greenhouse-emissions-rggi-states-declined-econometric-attribution-economic

The decline in carbon pollution has been accompanied by reductions in other harmful pollutants, such as sulfur dioxide, nitrogen oxides, and mercury. Abt Associates found that RGGI was directly responsible for a substantial share of the reduction in criteria air pollutants from 2009-14, avoiding hundreds of premature deaths and tens of thousands of lost work days.[11]

New York and other RGGI states have used the proceeds from allowance auctions to fund investments in energy efficiency, further reducing demand and generating large net economic benefits. This has helped our states achieve greater economic growth and lower electricity prices compared to other regions of the country. Specifically, average electricity prices across the region have decreased by 6.4 percent since RGGI took effect, while electricity prices in non-RGGI states have increased by an average of 6.2 percent. And since RGGI began, member states have reduced emissions by 15 percent more than other states and experienced 4.3 percent more economic growth.[12]

The facts demonstrate that RGGI is a clear economic-booster and job-creator. Between 2012 and 2014 alone, RGGI added $1.3 billion in economic value, and created over 14,000 job-years, in the region.[13] That's on top of the $1.6 billion in economic value and 16,000 jobs RGGI created in its first three years.[14]

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[11] Michele Manion, et al., *Analysis of the Public Health Impacts of the Regional Greenhouse Gas Initiative, 2009-2014* (Jan. 2017), Abt Associates, at 1-2, available at: http://www.abtassociates.com/AbtAssociates/files/7e/7e38e795-aba2-4756-ab72-ba7ae7f53f16.pdf

[12] Acadia Center 2017 Report at 3

[13] Analysis Group, *The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States* (July 14, 2015) at 5, 10, available at: http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_july_2015.pdf

[14] Analysis Group, *The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States* (Nov. 15, 2011), ("Analysis Group 2011 Report") at 2, available at: www.analysisgroup.com/uploadedfiles/publishing/articles/economic_impact_rggi_report.pdf

RGGI BENEFITS

Pollution Reduction Benefits (2009-2015)[1]

- Cut CO2 emissions from the power sector by 40% below 2008 levels

Economic Benefits (2012-2014)[2]

- Added $1.3 billion in economic value (on top of $1.6 billion created 2009-2011[3])
- Created over 14,000 job-years (on top of 16,000 job-years created 2009-2011[3])

Health Benefits (2009-2014)[4]

- Generated up to $8.3 billion in health savings
- Avoided up to 830 deaths
- Avoided up to 9,900 asthma aggravations
- Avoided up to 16,000 respiratory illnesses
- Avoided up to 390 heart attacks
- Resulted in up to 47,000 fewer lost work days

Investment Benefits (2008-2014)[5]

- Saved $629 million ($4.67 billion lifetime) in energy bills for >4.6 million households and >21 thousand businesses
- Saved 2.4 million MWh ($20.6 million lifetime) of electricity
- Avoided 5.3 million MMBtu (76.1 million MMBtu lifetime) in fossil fuel use
- Avoided 1.7 million tons (15.4 million tons lifetime) of CO_2 emissions

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1 Acadia Center. *Outpacing the Nation: RGGI's Environmental and Economic Success*. September 2017.

2 Analysis Group. *The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States*. July 14, 2015.

3 Analysis Group. *The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States*. November 15, 2011.

4 Abt Associates. *Analysis of the Public Health Impacts of the Regional Greenhouse Gas Initiative, 2009-2014*. January 2017.

5 The Regional Greenhouse Gas Initiative. *The Investment of RGGI Proceeds Through 2014*. September 2016.

In sum, RGGI has improved New Yorkers health, reduced climate risks and stimulated economic growth – a win, win, win. Yet in its proposed ACE rule, EPA fails to even mention RGGI or other successful carbon pollution state programs such as renewable portfolio standards. How can EPA choose the "best system" of emission reduction if it ignores successful approaches states and power companies have used to cost-effectively slash carbon pollution? EPA's approach in the ACE rule is inconsistent with the Clean Air Act and basic principles of administrative law.

In conclusion, the ACE rule would deal a bad hand to New Yorkers and all people across the nation. EPA should abandon its proposal, and spend its efforts on strengthening the Clean Power Plan and we will use all available tools to compel that outcome. Our future is at stake.

Thank you.