Clean Power Plan Proposed Rule

DISTRICT OF COLUMBIA DEPARTMENT OF THE ENVIRONMENT
DISTRICT OF COLUMBIA PUBLIC SERVICE COMMISSION

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Via electronic transmission

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Attention: Docket ID No. EPA-HQ-OAR-2013-0602 and Docket ID No. EPA-HQ-OAR-2013-0602

The District Department of the Environment (DDOE) and the District of Columbia Public Service Commission (PSC), on behalf of the Government of the District of Columbia, submit these comments on the United States Environmental Protection Agency's (EPA) proposed "Carbon Pollution Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule," published at 79 Federal Register 34,830 (June 18, 2014) (Proposed Rule) and on its "Carbon Pollution Emission Guidelines for Existing Stationary Sources: EGUs in Indian Country and U.S. Territories; Multi-Jurisdictional Partnerships," 79 Fed. Reg. 65,482 (Nov. 4, 2014),. These comments supplement written testimony previously submitted by DDOE Director, Keith A. Anderson, on July 30, 2014.

Executive Summary

EPA has requested comment on the Clean Power Plan Proposed Rule to establish emission guidelines for existing power plants under section 111(d) of the Clean Air Act (CAA). As stated in previous testimony submitted on July 30, 2014, the District of Columbia strongly supports EPA's actions to address climate change and regulate greenhouse gas (GHG) emissions from existing power plants, the nation's largest source of carbon pollution. The District submits these comments to reiterate our support for EPA's efforts and to address specific issues raised by the Proposed Rule as they pertain to the District.

In Section 1, these comments discuss the necessity of addressing carbon pollution from existing power plants and the potential benefits for the District. First, they highlight the significant consequences that climate change could have on the District. Second, they highlight how the District is taking aggressive action to mitigate carbon pollution, while underscoring the need for national action.

Section 2 provides background on the District's unique position regarding the Proposed Rule. Although the District is a large consumer of electricity, EPA did not propose a state emission goal for the District because it lacks any fossil fuel electric generating units (EGUs) subject to the Proposed Rule. These comments explain that, despite not having to submit a state plan, the Proposed Rule will affect the District. First, these comments explain how the rule will provide air quality and public health benefits, but that the magnitude of those benefits will depend on the stringency of the goals established by EPA and the policy decisions made by the states. Second, these comments explain that given the District's reliance on imported electricity, the decisions made by states throughout the PJM Interconnection Regional Transmission Organization (PJM RTO) region will affect District residents and ratepayers. Finally, these comments describe how the District's energy efficiency and renewable energy policies can play a role in states that will have to meet emissions guidelines. This section discusses the ability and desire of the District to participate in multi-state and regional plans.

In Section 3, these comments address EPA's proposed state plan considerations and the process for state plan submittal and review. As explained in Section 2, the District will be affected by the decisions made by neighboring states in developing their compliance plans. Therefore, these comments ask that EPA in its guidance to states recognize the importance of providing neighboring jurisdictions likely to be affected by the decisions made in state and/or multi-state plans an opportunity to consult and comment on these plans.

Finally, Section 4 discusses Building Block Three of the Best System of Emissions Reduction (BSER) and the need for guidance from EPA on how best to avoid double counting of renewable energy generation in state plans.

I. There is an urgent need to address carbon pollution from existing power plants.

The recent National Climate Assessment underscored, as many states and cities are already acutely aware, that climate change is impacting the United States today. Changes in climate are resulting in higher temperatures, rising sea level and ocean temperatures, more frequent and severe extreme weather, changes in snowpack and ice duration on lakes and rivers, and shifting plant and wildlife habitats. The consequences of these changes are significant. For the District of Columbia, a city bounded by two tidal rivers, the potential impacts include:

- an increase in the magnitude and frequency of extreme weather, including storms and floods, which threatens our energy, transportation, and water resource infrastructure;[1]
- increased risk of coastal flooding due to sea level rise;[2]
- more frequent and severe heat waves resulting in an increase in heat-related deaths and illnesses;[3] and
- higher temperatures and humidity contributing to higher smog levels, increasing the risk to human health.[4]

Recognizing the potential harm associated with unchecked climate change and our obligation to reduce our own contribution to its cause, the District has committed to reduce GHG emissions citywide and from our own government operations by 50% by 2032 and 80% by 2050

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[1] *See e.g.* Ayyub, B. M., Braileanu, H. G. and Qureshi, N. (2012), Prediction and Impact of Sea Level Rise on Properties and Infrastructure of Washington, DC. Risk Analysis, 32: 1901–1918 *available at* http://onlinelibrary.wiley.com/doi/10.1111/j.1539-6924.2011.01710.x.

[2] *See e.g.* National Oceanic and Atmospheric Administration (2014), *Sea Level Rise and Nuisance Flood Frequency Changes around the United States, available at* http://tidesandcurrents.noaa.gov/publications/NOAA_Technical_Report_NOS_COOPS_073.pdf.

[3] *See* Kalkstein et al (2013), *Assessing the Health Impacts of Urban Heat Island Reduction Strategies in the District of Columbia, available at* http://ddoe.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/20131021_Urban%20Heat%20Island%20Study_FINAL.pdf.

[4] *See e.g.* The Third National Climate Assessment, Chapter 9: Human Health *available at* http://nca2014.globalchange.gov/report/sectors/human-health.

below 2006 levels.[5] Like many states, the District has implemented policies to achieve its GHG emission reduction goals including a renewable portfolio standard (RPS), aggressive residential and commercial building energy codes, and a suite of rate-payer funded energy efficiency programs delivered by the DC Sustainable Energy Utility. EPA's building block approach properly recognizes the success of these policies in states and cities across the country.

The District has made significant progress towards its goals, cutting emissions 12.5% citywide and 23.5% from its own operations between 2006 and 2011.[6] However, it cannot meet its future goals through actions within the District alone. Like many cities, the energy used to power most buildings in the District is imported from generators outside of the District. Buildings account for the lion's share, nearly three quarters, of all of the District's GHG emissions. Unlike other cities, nearly 100% of the energy imported into the District comes from other states. Electricity usage alone accounts for more than half (54.4%) of its emissions. This is driven in large part by the carbon intensity of the electricity produced outside of the District's borders. It is imperative that we act as a nation to reduce the carbon pollution from existing power plants. The Clean Power Plan, by driving the shift to lower carbon power generation, could have a significant impact on the District's emissions and better enable it to meet its goals. To demonstrate the potential significance of the Proposed Rule on the District's GHG emissions, DDOE calculated what the District's emissions would have been in 2011 (the most recent year for which data is available) had the regional carbon emissions rate per unit of power been 30% lower.[7] Overall GHG emissions would have been 14.5% lower, and total emissions from the building sector would have been 26% lower.

II. While the District does not have any EGUs subject to the Proposed Rule, it has a role to play and a stake in successful implementation of the Proposed Rule.

There are no existing EGUs within the District that meet the EPA's criteria for affected EGUs in Section V, C of the Proposed Rule. Therefore, EPA has not proposed emissions

[5] *See* District of Columbia, *Sustainable DC Plan*, *available at* http://www.sustainabledc.org/wp-content/uploads/2012/10/SDC-Final-Plan_0.pdf.
[6] *See* District of Columbia Department of the Environment, The 2011 District of Columbia Greenhouse Gas Emissions Inventory *available at* http://ddoe.dc.gov/node/384852.
[7] The District uses EPA's eGRID Subregion Emissions Factors for RFC East to calculate its greenhouse gas emissions. This calculation compares emissions using the 2010 emission rates and a 30% improvement over eGrid 2010. A 30% improvement was chosen as a conservative approximate average of the state emissions rate goals in neighboring states.

guidelines for the District. Accordingly, the District would not have to submit a state plan for meeting its emissions goal. However, as noted above, the District imports nearly all of its electricity from generation in other states via the regional transmission grid managed by PJM and, therefore, will be affected by the actions states within its region take to comply with their emissions guidelines.

A. The District stands to benefit from improved air quality and resulting health benefits, but the magnitude of those benefits depends on the policy decisions of upwind states.

The Proposed Rule could have significant benefits for the District's air quality. The magnitude of those benefits will depend on the stringency of the emissions goals established by EPA and the approach taken by states to meet them. Air quality in the District, including concentrations of particulate pollution and ground-level ozone precursors, is heavily influenced by emissions from power plants in upwind states.[8] A Harvard School of Public Health study of the potential air quality and public health benefits of regulating carbon pollution from existing power plants highlights the benefits to the region surrounding the District in particular.[9] However, this study also found that the magnitude and extent of the health and air quality co-benefits of the Proposed Rule will depend on critical policy decisions in the final standards and state plans. Specifically, the study finds that an approach, similar to that proposed by EPA, of setting stringent goals and allowing flexible compliance through the use of energy efficiency and renewable energy, will result in the greatest co-benefits. Accordingly, the District urges EPA to maintain its BSER approach and ensure that the state emission guidelines will maximize air quality protection and reductions in carbon emissions.

B. Given the District's reliance on imported electricity, the decisions made by states throughout the PJM RTO region will affect District residents and ratepayers.

With the closure of the last two remaining utility-owned generating units in 2012, the District now imports nearly all of its electricity from outside the District, utilizing the PJM

[8] *See* EPA's proposed Cross-State Air Pollution Rule, *available at* http://www.epa.gov/crossstaterule/.
[9] *See* Harvard School of Public Health et al, Health Co-benefits of Carbon Standards for Existing Power Plants: Part 2 of the Co-Benefits of Carbon Standards Study, *available at* http://www.chgeharvard.org/resource/health-co-benefits-carbon-standards-existing-power-plants.

interconnection via the local distribution system managed by the Potomac Electric Power Company (Pepco). District utility customers, therefore, will be affected by the decisions made by states throughout the PJM region and their implications for the wholesale cost of generation and grid reliability. Analysis conducted by PJM has shown that the portfolio of approaches that states chose to comply with their emissions guidelines, and whether or not they choose to cooperate regionally, will affect both compliance costs and absolute carbon emissions.[10]

C. The District of Columbia, and other jurisdictions without fossil fuel generation units subject to the proposed emission guidelines, should be authorized to participate in multi-state and regional plans.

EPA is soliciting comments on a supplemental proposal, "Carbon Pollution Emission Guidelines for Existing Stationary Sources: EGUs in Indian Country and U.S. Territories; Multi-Jurisdictional Partnerships," 79 Fed. Reg. 65,482 (Nov. 4, 2014), to authorize jurisdictions without EGUs subject to the proposed emissions guidelines, like the District, to partner on developing implementation plans with other jurisdictions that do have EGUs subject to the guidelines.

The District strongly supports EPA authorizing these partnerships and providing guidance related to the enforceability of such multi-jurisdictional plans. The District also supports EPA's proposal to allow states to utilize trading programs to meet their emissions goals and urges EPA to authorize and provide guidance for multi-state trading programs to incorporate jurisdictions without affected EGUs.

The District's renewable energy and demand-side energy efficiency policies are well suited to be able to contribute to meeting a multi-jurisdictional carbon emission goal. As the energy consumed in the District is generated elsewhere, actions taken in the District to reduce energy consumption and increase the use of distributed renewable energy will result in avoided carbon emissions in jurisdictions with affected EGUs. Avoided emissions could be calculated using accepted standard methodologies such as EPA's Avoided Emissions and Generation Tool

[10] *See* PJM, "EPA's Clean Power Plan Proposal: Review of PJM Analyses Preliminary Results," *available at* http://www.pjm.com/sitecore%20modules/web/~/media/documents/reports/20141117-epas-clean-power-plan-proposal-review-of-pjm-analyses-preliminary-results.ashx

(AVERT) for renewable energy and standard technical resource manuals that project savings for energy efficiency technologies and programs.[11]

Authorizing jurisdictions without affected EGUs, like the District, to partner on developing implementation plans with other jurisdictions that do have EGUs subject to the guidelines would allow them to reap the potential economic benefits of the shift toward cleaner energy while contributing to the success of the Clean Power Plan. Furthermore, providing support for demand-side energy efficiency programs in the District through multi-state plans could help offset any potential rate effects resulting from the rule by helping District utility customers reduce their energy consumption.

III. There is an important role for neighboring jurisdictions in development and review of state or multi-jurisdictional plans.

While states will likely weigh the costs and benefits of the combination of measures included in their plans, they will not necessarily consider the regional effects or opportunities to maximize cost effectiveness. For example, the lowest cost approach from a regional perspective may involve leveraging renewable energy generation and demand-side resources throughout the region, rather than relying solely on an in-state only approach relying on building blocks one and two. The District is willing to pay its fair share of the cost of addressing carbon pollution from existing power plants, as the benefits of cleaner air and avoiding the cost of climate change will far outweigh the costs; provided that it has an opportunity to comment and have meaningful input in the state plans that will affect the District. Consequently, the District requests that EPA outline a process by which neighboring jurisdictions can provide meaningful comments on the development of state plans that will affect them.

EPA is proposing that, upon receipt of a complete state plan, the agency will review the plan and approve or disapprove the plan within 12 months. This process would involve a notice-and-comment rulemaking process similar to that used for approving state implementation plan submittals under section 110 of the CAA. It is not clear what, if any, opportunity for public

[11] For example, the DC Sustainable Energy Utility has contributed to the development of Northeast Energy Efficiency Partnerships *Mid-Atlantic Technical Reference Manual,* which offers guidance on standardized evaluation, measurement and verification methods and energy savings assumptions. *See* http://www.neep.org/mid-atlantic-technical-reference-manual-v40.

comment EPA would require prior to the submission of the plan that would allow for neighboring jurisdictions to evaluate and respond to plans prior to them being submitted to EPA.

The District proposes that, in the Final Rule, EPA encourage or require states (or multi-state collaborations) to consult with neighboring jurisdictions likely to be affected by their plan as a result of the interstate nature of the grid prior to submitting the plan to EPA. This arrangement could be similar to the coordination required between States/Tribes and Federal Land Managers (FLMs) under the Regional Haze Rule (40 C.F.R. § 51.308(i)). The District supports EPA's proposal that the ISOs and the RTOs could effectively play a facilitative role in coordinating development and implementation of region-wide, multi-state plans, or coordinated individual state plans. The ISOs and RTOs in this role could also facilitate the consultation of affected, neighboring jurisdictions and ensure that costs and benefits are shared.

IV. The final rule should ensure that avoided emissions from renewable energy generation and from demand-side energy efficiency programs are not double counted in state plans.

In Section VIII F6 of the Proposed Rule and the subsequent Notice of Data Availability, EPA properly recognizes the interstate nature of the electrical grid and that renewable energy and energy efficiency policies in one state will affect the electrical system beyond its borders. EPA also appropriately recognizes the complexity of allowing states to take into account emission reductions resulting from programs like RPSs while minimizing the likelihood of double counting. EPA is seeking comment on several options for properly attributing avoided emissions and how they might be applied in state plans.

The District enacted its RPS in 2005, D.C. Code § 34-1432, and increased it in 2008 to require 20% of retail electricity sales to come from eligible renewable sources by 2020. In order to comply with the law, suppliers may purchase renewable energy credits (RECs) from resources located within the PJM RTO region or within a state adjacent to the PJM RTO region. Eligible RECs are created and tracked through the PJM-EIS's Generation Attribute Tracking System (GATS). As of 2014, renewable energy generators located in 14 states are eligible to participate in the District's RPS.[12] Based on the interstate nature of the District's RPS, and the desire to avoid double counting, the District supports EPA's proposal to allow states to take into account

[12]*See* Public Service Commission of the District of Columbia, 2014 Report on the Renewable Portfolio Standard, *available at* http://www.dcpsc.org/pdf_files/reports/renewable_2014.pdf.

all of the emission reductions from renewable energy measures implemented by the state, whether they occur in the state or outside its borders. In order to avoid double counting, it is also important that states be prohibited from counting renewable energy generation within their borders for compliance in their 111(d) plans if the associated RECs are used for compliance with out-of-state policies.

As the District is not required to submit a state plan or comply with emissions guidelines under the Clean Power Plan, the renewable energy generation used to comply with the District's RPS will not be attributed to meeting its own goals under EPA section 111(d). It does however account for the generation, whether located in the District or other states, in meeting its own policy goals under the RPS and its long-term goal of reaching 50% renewable energy by 2032. In addition to the RPS, the District Government, as well as several private institutions including two large universities and a major hospital, are signing long-term power purchase agreements with out-of-state renewable energy generators. If these agreements include the purchase of both power and RECs by District entities, that generation should not be counted towards another state's compliance obligation under Section 111(d). It is the District's intent for its policies to encourage new and additional renewable energy generation in our region. Therefore, while another state claiming the generation attributed to the District's RPS may not be considered double counting for the explicit purposes of 111(d), we urge EPA in its Final Rule to recognize it as such. EPA could do so by encouraging in its guidance to states that they rely only on existing REC trading systems such as PJM-EIS to attribute avoided emissions from renewable energy generation.

V. Conclusion

The District of Columbia recognizes our collective and moral obligation to address climate change in order to protect the health and vitality of District residents and our local economy, and it will continue to do its part to address GHG emissions. The District strongly supports EPA's proposed regulation of GHG emissions from existing power plants. The Clean Power Plan is a critically important step that will help the District to meet its local climate goals. The District will be affected by the decisions made by neighboring states in developing their compliance plans and, therefore, recognizes the importance of providing neighboring jurisdictions likely to be affected by the decisions made in state and/or multi-state plans an

opportunity to consult and comment on these plans**.** The comments provided above are meant to strengthen the Proposed Rule and clarify the role that the District can play in its successful implementation. The District looks forward to continuing to work with EPA on the development of the Final Rule.

Respectfully submitted,

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