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January 21, 2016

Office of Air and Radiation
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
Submitted via *www.regulations.gov*

Re: Docket No. EPA-HQ-OAR-2015-0199, Federal Plan Requirements for Greenhouse Gas Emissions from Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to comment on the proposed federal plan requirements, model trading rules, and amendments to framework regulations for the Clean Power Plan ("proposed rule"). NACWA represents the interests of nearly 300 public wastewater treatment agencies, which treat and reclaim a majority of the wastewater generated each day throughout the nation. While the primary function of these publicly owned treatment works (POTWs) is to protect public health and the environment, an increasing number of utilities are becoming resource recovery facilities that generate energy, recover nutrients, and reuse treated water.

In the final Clean Power Plan, EPA recognized that the use of some biomass-derived fuels can play an important role in controlling increases of CO₂ levels in the atmosphere, and that increasing renewable energy use and demand-side energy efficiency can lower CO₂ emissions from electric utilities. Wastewater utilities can play an important role in all of these CO₂-reduction methods. The processes used in wastewater treatment generate biogas and biosolids that can be used as fuels. EPA's *Framework for Assessing Biogenic Carbon Dioxide for Stationary Sources* (November 2014), provides an analysis of the use of biogas and biosolids for fuel, resulting in an illustrative biogenic accounting factor (BAF) of -0.88. The negative BAF means that an emissions reduction occurs due to the wastewater treatment process, with 88% more CO₂ sequestered than emitted. Use of this renewable energy at POTWs, along with energy efficiency measures that can be implemented at POTWs, can substantially reduce the energy demand of POTWs from electric utilities.

It is important for the federal plan and the model trading rules to include wastewater utilities to ensure that this renewable energy source is used nationwide. NACWA offers the following comments and requests for clarification about the proposed rule.

Use of Energy Produced by POTWs in Mass-Based Approach

The proposed rule should be clarified so that energy produced at POTWs, as well as energy efficiency measures implemented at POTWs, are eligible for trading in the mass-based approach. While wind, solar, geothermal, and other renewable energy sources are specifically included in this approach, renewable energy from POTWs is not listed. POTWs can provide an important contribution to CO₂ reduction from electric utilities, and this should be encouraged through Clean Power Plan trading programs. POTWs have the ability to measure and verify actual energy savings and are professionally staffed, operated continuously, and present in almost every community nationwide. Energy production and efficiency programs at POTWs usually have additional environmental benefits, such as a reduction in nutrients discharged to waterways, a reduction in the quantity of solids disposed of in landfills, and nutrient recovery in biosolids to offset the application of synthetic fertilizers. None of the other renewable energy technologies, such as solar or wind, have such a wide variety of environmental and societal benefits as energy from POTWs. EPA should therefore encourage energy from POTWs in both model trading approaches.

Wastewater-Derived Biomass for Emission Rate Credits (ERCs)

EPA requested comment on the inclusion and treatment of biomass in the rate-based federal plan and model rule. EPA recognizes in the proposal that many states already support waste-derived feedstocks to help control atmospheric CO₂, noting that these feedstocks may include “biogas generated through the treatment of waste water, due to the anaerobic decomposition of biological materials” and “biogas generated from the decomposition of... food waste in an anaerobic digester.” NACWA supports the use of biomass as an eligible measure, and EPA’s proposal for a list of pre-approved qualified biomass fuels that includes biosolids and biogas from POTWs. NACWA also supports the inclusion of anaerobic digestion of food waste, since some wastewater utilities use food waste to increase their production of biogas.

Wastewater-Derived Energy Used at POTWs

In addition to anaerobic digestion of biosolids to produce biogas, POTWs can use incineration, gasification, and pyrolysis to recover the energy contained in biosolids. POTWs can also produce energy through various other methods, such as using the kinetic energy of flowing wastewater, recovering the heat in wastewater, and using microbial fuel cells to generate electricity from the organics in wastewater. All of these technologies are in various stages of research and implementation. POTWs use this energy at their own facilities, reducing the dependence of POTWs on energy from electric utilities. Excess energy that is not used at the POTW may be put back onto the electric grid, but POTWs have found this process difficult. NACWA requests that the proposed rule specifically identify energy produced and used at the POTW as eligible for ERCs, as well as any excess energy that is put onto the electric grid or otherwise used off-site.

Energy Efficiency Measures Implemented at POTWs

Wastewater utilities consume at least 0.8% of U.S. electricity, but this number could be reduced through energy efficiency measures implemented at POTWs. Because water infrastructure is generally in place for many years, there are many pumps, motors, treatment facilities, pipes, and others systems within the water sector that are

NACWA Comments on Proposed Clean Power Plan Implementation

January 21, 2016

Page 3 of 3

at least several decades old. In many cases, these systems are much less energy efficient than their modern equivalents. Currently, water sector renewable energy and demand-side measures may be under-utilized in reducing emissions for many reasons, including competing high priority public health needs and necessary infrastructure upgrades, and lack of funding for implementing efficiency programs. NACWA supports the use of energy efficiency projects to generate emission rate credits, which would provide incentives for POTWs to implement energy efficiency measures.

Thank you for your consideration of these comments. Please contact me at 202-533-1836 or cfinley@nacwa.org if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Cynthia A. Finley".

Cynthia A. Finley, Ph.D.
Director, Regulatory Affairs