February 25, 2015

Gina McCarthy
Administrator
Office of the Administrator 1101A
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Dear Administrator McCarthy:

We are a group of environmental organizations located in Virginia. We support the Clean Power Plan and believe it has significant potential to reduce power sector emissions in our state, in particular through the expansion of zero-emissions renewable energy and energy efficiency. However, we are extremely concerned that if EPA treats biomass as carbon neutral under the final Clean Power Plan, it will openly invite Dominion Virginia Power, the dominant utility in Virginia, to burn wood from forests to help meet its emission reduction obligations under the Plan.

As EPA knows, wood is the fuel of choice for biomass power plants because it contains more energy and is more plentiful than other forms of biomass. Therefore, labeling biomass as emitting zero carbon would amount to a policy that promotes forest-cutting to reduce carbon emissions. Such a policy would contradict a growing body of science, including peer-reviewed studies in leading journals,[1] EPA's own scientists and Science Advisory Panel, and a study commissioned by the state of Massachusetts. This research has shown that biomass power actually increases emissions relative to fossil fuels, and that it takes several decades for new forest growth to re-sequester the carbon released when forests are cut for fuel. In addition, these studies show that burning forestry residues, the fuel Dominion claims to burn, also increases carbon emissions and that it takes years to decades before such emissions are offset.

Since 2012, Massachusetts and Washington, DC have significantly reduced renewable energy subsidies to bioenergy due to its excessive greenhouse gas emissions. In Vermont, the Public Service Board denied a certificate of public good for a wood-burning power plant, writing that "the evidentiary record supports a finding that the Project would release as much as 448,714 tons of CO_2e per year, and that sequestration of those greenhouse gases would not occur until future years, possibly not for decades, and would not occur at all in the case of forest-regeneration failures." In addition, the American Lung Association opposes the use of biomass power because of its high emissions of conventional pollutants, which can exceed those from coal-fired power per unit energy generated.

[1] See, e.g., Searchinger, T., et al. 2009. Fixing a critical climate accounting error. Science 326: 527-528. Colnes, A., et al. 2012. Biomass supply and carbon accounting for Southeastern Forests. Biomass Energy Resource Center, Montpelier, VT. Mitchell, S., et al. 2012. Carbon debt and carbon sequestration parity in forest bioenergy production. GCB Bioenergy (2012) doi:10.1111/j.1757-1707.2012.01173.x. McKechnie, J. et al. 2011. Forest bioenergy or forest carbon? Assessing trade-offs in greenhouse gas mitigation with wood-based fuels. Environmental Science and Technology, 45: 789-795.

EPA's formula for calculating state carbon dioxide emissions under the proposed Clean Power Plan does not account for emissions from wood-fired power plants, although the equation does count the power generated by burning biomass. On November 19th 2014, EPA issued a memorandum indicating that states that wish to use bioenergy in their compliance plans would be able to burn a variety of materials, including "sustainably harvested" biomass. Treatment of these materials as having zero emissions is not supported by science, as highlighted by the recent literature and EPA's Science Advisory Panel. Beyond this evidence, in our travels across Virginia, it is rare to find a forestry operation, no matter how intensive, that is not characterized as "sustainable." Therefore, the term "sustainable" places little to no limit on the type or amount of biomass that might be burned for electricity production.

In the last two years, before the issuance of the proposed Clean Power Plan, Dominion has converted three coal plants to run on wood at Altavista, Hopewell, and Southampton for a combined total of 153 megawatts, and has built a new 600 megawatt "hybrid" energy center at Virginia City that will burn about 20 percent wood (117 megawatts). These facilities joined Dominion's existing 83 megawatt wood-fired Pittsylvania plant.

Once Dominion's total bioenergy capacity is online, these facilities at fulltime operation would burn about 4.5 million tons of wood a year. They would represent a 4.1 percent increase in electricity generation, but would cause a 13.6 percent increase in Virginia's power sector CO_2 emissions over the 2012 baseline. Yet under EPA's proposed treatment of bioenergy in the Clean Power Plan, this substantial increase would be treated as zero.

Dominion knew that biomass carbon emissions could be regulated by EPA when it invested in these biomass conversions and further admitted to the Virginia State Corporation Commission in 2011 that regulation of biogenic carbon would reduce the value of its coal-to-wood conversions,[2] but the company proceeded with the projects anyway. Now, Dominion claims in its comments to EPA on the Clean Power Plan that, given the company's "significant investment" in bioenergy, "it is important for our customers that biomass emissions be carbon neutral for purposes of this rule."[3] In fact, Dominion's customers will not be well-served by a rule that does not actually reduce emissions, and they would be better served by inducing the company to transition to zero-emissions renewable energy sources for compliance. Even prior to issuance of the Clean Power Plan, Dominion was projecting that 74.4 percent of its renewable energy will come from bioenergy in 2029.[4] If EPA finalizes treatment of biomass as having zero emissions, Dominion and other power companies would have an even greater incentive to burn forest wood to meet the Plan's carbon dioxide reduction targets.

Our groups want real reductions in carbon emissions from the power sector, and we want to protect Virginia's forests, not see them cut for fuel. We ask EPA to heed the advice of its own Science Advisory Board and fully recognize the multi-year to multi-decade impact of burning

---

[2] Direct Testimony of Glenn A. Kelly on behalf of Virginia Electric and Power Company Before the State Corporation Commission, Case No. PUE-2011-00073, -74, -75, page 13.

[3] Dominion Resources, Inc., Comments to the Environmental Protection Agency on the Carbon Pollution Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rules (79 Fed. Reg. 34830; June 18, 2014). Page 17.

[4] Appendix 6A of Dominion 2014 IRP.

biomass on net carbon emissions, even when "forest residues" are burned for fuel. We don't want Virginia to be known as the state that harvests forests to reduce its dependence on coal. IF EPA allows biomass under the final Clean Power Plan, it must fully account for bioenergy emissions, or remove woody biomass as a compliance measure under the rule. EPA recently released its Revised Framework for Assessing Biogenic CO2 Emissions from Stationary Sources, which is currently undergoing further review by the Science Advisory Board. If EPA intends to apply this framework to the Clean Power Plan, the agency should let the Board complete its review before including biomass in the final rule.

Thank you,

Natalie Pien
350 Loudon

Gail Fendley, President
Michelle's Earth Foundation

Chris Miller, President
Piedmont Environmental Council

Glen Besa, Director
Sierra Club-Virginia Chapter

David Carr, General Counsel
Southern Environmental Law Center

Anne Little
Tree Fredericksburg

Bud Watson, Executive Director
Virginia Forest Watch

Ernie Reed, President
Wild Virginia