



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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February 26, 2018

The Honorable Scott Pruitt
Administrator
Environmental Protection Agency
EPA Docket Center (EPA/DC), Mail code
Attn: Docket ID No. EPA-HQ-OAR-2017-0545
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: ANPRM for Clean Power Plan Replacement (Docket ID No. EPA-HQ-OAR-2017-0545)

Dear Administrator Pruitt:

The Clean Power Plan (“CPP”, 40 C.F.R. Part 60, Subpart UUUU) should not be repealed. The CPP was put in place after extensive stakeholder consultation, public comment, and arduous rulemaking by EPA. A voluminous and persuasive record exists supporting the CPP. The record shows that the CPP is a reasoned and reasonable response to the risks of climate change as well as a solid structure for creating economic opportunities with appropriate flexibility for states. Repeal of the CPP will increase regulatory uncertainty, increase costs for, and disrupt the long range plans of the power sector. Beyond the environmental, economic and public health benefits the CPP fulfills EPA’s legal obligation to regulate greenhouse gas emissions. In doing so it maintains the longstanding cooperative federalism and division of responsibility between EPA and states under the Clean Air Act and aligns with past emissions regulation of the power sector. Our objections to a repeal of the CPP are described in detail in comments submitted in concert with the environmental and energy regulators of other states (*forthcoming*) and through the Attorneys General of a coalition of states, counties, and cities that includes the State of Washington.¹

Despite our strong objections to a repeal of the CPP, the State of Washington offers the following comments in response to the Environmental Protection Agency’s Advance Notice of Proposed Rulemaking on State Guidelines for Greenhouse Gas Emissions from Existing Sources (ANPRM). In addition, we note and incorporate by reference additional comments submitted by the State of Washington in conjunction with the energy and environmental regulators of other states, and in conjunction with the Attorneys General of other states, on this ANPRM.²

¹ *Comments on EPA Administrator Scott Pruitt’s Improper Prejudgment of Outcome of Proposed Repeal of Clean Power Plan, Attorneys General of Washington, California, Oregon, New York, et al, January 9, 2018.*

² Comments entitled, “Re: State Environmental and Energy Regulators’ Comment on Advance Notice of Proposed Rulemaking, Docket ID No. EPA-HQ-OAR-2017-0545”, February 26, 2018, submitted by Georgetown Climate Center on behalf of Washington, Oregon, California, North Carolina, Minnesota, *et al.* and comments from the Washington Attorney General *et al.*, February 26, 2018, in response to the ANPRM.

These comments in no way reflect agreement with any decision to repeal and replace the CPP, but instead point out important ways in which a replacement for the CPP may end up doing damage to the climate, the economy, and affected citizens beyond that caused by the repeal itself. In addition, we note that any replacement policy for the CPP should acknowledge the existing and future policies undertaken by the State of Washington that are, by contrast, striving to make meaningful reductions in greenhouse gas emissions. Finally, we note areas of improvement applicable to any power sector greenhouse gas policy, including potential future revisions to the Clean Power Plan should EPA keep it in place.

1. An emissions standard for greenhouse gases should lead to lower, not greater, emissions.

EPA acknowledges in the ANPRM that the, “so-called rebound effect could result in smaller overall reductions in greenhouse gas emissions.” However, EPA does not acknowledge, but should, that in some regions of the country modeling demonstrates that an “inside the fence line” approach in isolation is likely to result in no net emission reductions and possibly an increase in greenhouse gas emissions. Notably, modeling done using the IPM model (a core emissions modeling tool for EPA) shows this result for the Pacific Northwest IPM region (Washington, Oregon, Idaho, and Montana), with an “inside the fence line” approach resulting in a range of no emission reductions on the bottom end and up to one million short tons of additional CO₂ emissions by 2020.³ A replacement for the CPP should result in significantly lower emissions.

2. A replacement for the CPP should not harm existing and future greenhouse gas emission reduction programs put in place by individual states or groups of states.

The ANPRM asks for comments on the interactions between existing and future greenhouse gas programs implemented at the state level with a potential replacement program for the CPP. Washington has several greenhouse gas emission reduction programs for power plants that are making important strides to combat climate change in the power sector, including an emissions performance standard that sets a maximum greenhouse gas emissions rate for power serving Washington customers and a carbon dioxide mitigation standard for new power plants that requires 20 percent of the plant’s lifetime greenhouse gas emissions to be mitigated by on-site actions or through the purchase of carbon credits. As one step to ensure that a CPP replacement can work with existing state programs, any new rule should be adaptable to both a mass- and rate-based standard. In addition, allowing intra- and inter-state trading programs, and allowing states to use existing or future state measures as a means of compliance when they can demonstrate they are of equal stringency, are all important components to allow states that are serious about reducing greenhouse gas emissions to do so without being impeded by contrary federal action.

³ Data from *US power plant carbon standards and clean air and health co-benefits*; Charles T. Driscoll, Jonathan J. Buonocore, Jonathan I. Levy, Kathleen F. Lambert, Dallas Burtraw, Stephen B. Reid, Habibollah Fakhraei & Joel Schwartz, *Nature Climate Change* volume 5, pages 535–540 (2015), doi:10.1038/nclimate2598. See #51 at https://science-policy-exchange.org/sites/default/files/documents/House%20Briefing%20Slides_6%20Feb%202018_0.pdf

3. A regional perspective is critical for ensuring system reliability and maximizing benefits.

An “inside the fence line” approach ignores the realities of the modern power system, with its highly complex and inherently integrated operations across power grids. This is especially true in the West, where long distance transfers of power and complex power market interactions are common. A key danger in ignoring the complexities of the modern power system is that overall system reliability is at greater risk. Instead of incentivizing states and stakeholders to take a systems approach, the regulatory approach suggested in the ANPRM will instead place unnecessary restrictions on regulated entities and encourage a piecemeal, myopic view of the power system - potentially resulting in decreased reliability and increased risk to the power grid.

4. A replacement for the CPP should maximize public health benefits to Americans.

Electricity generation is a major source of air pollutants in the United States, including sulfur dioxide, nitrogen oxides and other toxic air emissions. In its regulatory impact analysis, EPA determined that the public health benefits of the CPP were even larger than the climate benefits. Any replacement regulatory approach should maximize overall benefits by taking all reasonable opportunities to limit dangerous air pollutants and protect public health. Unfortunately, the approach proposed in the ANPRM will have minimal public health benefits relative to the CPP, and may even lead to an increase in mortality and hospitalizations in some parts of the country.⁴

5. A CPP replacement should not prevent New Source Review (NSR) permitting to occur at Electric Utility Generating Units (EGUs) that undergo changes to comply with an emission guideline put in place to replace the CPP.

Modifications of a plant that result in a major modification to an EGU must continue to be subject to Major NSR permitting requirements, including the requirement to meet BACT. It would represent a backsliding of NSR requirements if EPA were to exempt changes to comply with the emission guideline from NSR requirements. Existing rules provide ample opportunities for an EGU owner to demonstrate that a modification is not subject to the permitting requirements (e.g. 40 CFR 52.21(a)(2) and 52.21(r)(6) and (7)). Sources should avail themselves of these opportunities rather than EPA providing exemption from the requirements. In addition, EPA has completed enforcement against EGU owners for completing the types of changes listed in the ANPRM without receiving the appropriate permit. To change policy and exempt these actions, as proposed in the ANPRM, would not be equitable considering the costs that these EGU owners expended in these enforcement cases.

6. Improvements to combined cycle combustion turbines should not be underestimated.

In the ANPRM the EPA appears to discount the potential contributions of heat rate improvements to combined cycle combustion turbines relative to improvements in coal fired EGUs. In the Northwestern US, combined cycle combustion turbines are the dominant fossil fuel fired generating sources. Heat rate improvements to these types of power plants can provide up to a 10% improvement in efficiency.

⁴ *US power plant carbon standards and clean air and health co-benefits*; Charles T. Driscoll, Jonathan J. Buonocore, Jonathan I. Levy, Kathleen F. Lambert, Dallas Burtraw, Stephen B. Reid, Habibollah Fakhraei & Joel Schwartz, Nature Climate Change volume 5, pages 535–540 (2015), doi:10.1038/nclimate2598.

Example projects that can be implemented include inlet fogging/cooling, upgraded turbine blades and guides to improve energy recovery, and changes to the burners to reduce fuel use.

7. Include simple cycle turbines in any EPA greenhouse gas power sector standard.

EPA should include simple cycle turbines in any power sector greenhouse gas emissions standard. These units are increasingly supporting wind and solar generation in our power mix. In some cases existing combined cycle turbine plants are being considered for retrofits to allow them to operate as simple cycle units to support wind generation. In addition, adding heat recovery steam generators and steam generating turbines to simple cycle units is a known efficiency upgrade. Including these types of units enhances the overall effectiveness of any power sector standard, including the Clean Power Plan, and increases fairness across EGU types to ensure that as many EGUs as possible are regulated.

To reiterate, the State of Washington does not support a replacement program for the CPP because there is no reason to repeal the CPP. If the EPA makes the unfortunate decision to repeal the CPP, and if the courts allow such a move to stand, then any replacement program for the CPP should, at a minimum, allow states to pursue effective greenhouse gas emission reduction programs on their own or in concert with other states. Importantly, a decision to pursue a replacement program for the CPP that incorporates key concepts outlined in the ANPRM may increase greenhouse gas emissions in the Pacific Northwest, miss opportunities to improve air quality and reduce health impacts on residents, while disrupting power sector markets and potentially degrading the reliability of the power grid as a systems approach to the power sector is abandoned.

Thank you very much for the opportunity to provide our perspective on this important issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Stuart A. Clark". The signature is fluid and cursive, with the first name being the most prominent.

Stuart A. Clark
Air Quality Program Manager