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January 21, 2016

The Honorable Regina A. McCarthy, Administrator
United States Environmental Protection Agency
Attn: Docket ID No. EPA-HQ-OAR-2015-0199
Via Electronic Submission to Regulations.gov

RE: Comments on *EPA's Proposed 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* [80 Fed. Reg. 64966, 23OCT2015]

Dear Administrator McCarthy:

On October 23, 2015 the U.S. Environmental Protection Agency (EPA) published its proposed *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*, in the Federal Register. The EPA is proposing a federal plan and model state trading rules to implement its final greenhouse gas emission guidelines for existing fossil fuel-fired electric generating units, which were also published in the Federal Register on October 23, 2015 as the *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units* (hereinafter, Clean Power Plan, CPP, or Emission Guidelines). The West Virginia Department of Environmental Protection (WVDEP) offers the following comments on the proposal, as well as the associated technical support documents and accompanying information.

With this proposal, the EPA is continuing to implement its unlawful regulation of greenhouse gas emissions from existing electric generating units under Clean Air Act section 111(d). The WVDEP identified a multitude of legal infirmities in comments it submitted on the EPA's proposed CPP, *see*, EPA-HQ-OAR-2013-0602-23540,[1] none of which were resolved when the EPA published the CPP as a final rule. Representatives of at least 26 states have agreed that the CPP is unlawful and are challenging it in court. When the courts have rejected the CPP, this rulemaking effort will be all for naught. Subject to all of the legal objections the WVDEP and others have raised in opposition to the CPP, the WVDEP offers the comments below.

[1] Available at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-23540.

General Comments

The Proposal is Unlawful. The same legal arguments the WVDEP made against the CPP apply with equal force to this proposal. Some of these points are summarized below. Other legal arguments are made in later parts of these comments. The EPA must abandon this patently unlawful undertaking.

- The terms of section 111(d) preclude its use to regulate sources the EPA has regulated under section 112. Existing EGUs are regulated under section 112 through the EPA's Mercury Air Toxics Rule. Therefore, the EPA cannot regulate existing EGUs under section 111(d) as the EPA proposes to do with this rule.

- Regulation of existing EGUs under section 111(d) requires a valid new source rule for EGUs under section 111(b). This predicate for regulation of existing EGUs is absent because the section 111(b) rule for new EGUs is invalid. The "best system of emissions reduction" (BSER) for the EPA's 111(b) rule is carbon capture and storage (CCS), which has not been adequately demonstrated. Therefore, the section 111(b) rule is invalid. This precludes regulation of existing EGUs as is proposed here.

- The EPA's lawful authority under section 111(d) and its rules is limited to developing "guidelines", including a BSER, which serve only to inform states' judgment. Section 111(d) gives states responsibility for developing standards of performance in a state plan. This proposal in combination with the Emission Guidelines usurp the authority section 111(d) gives to the states.

- The Clean Air Act, including section 111, grants authority to regulate emissions from stationary sources. Nothing in section 111(d) gives the EPA authority: to assume control of dispatch of power on the nation's electric grid (Building Block 2); regulate non-emitting generators of renewable energy (Building Block 3); or, use a trading scheme that incorporates Building Blocks 2 and 3 into a program for regulation of emissions from sources. The EPA cannot require states to develop plans that confer this *ultra vires* authority on either the State or the EPA.

- With the Emission Guidelines, the rule allows the EPA to unlawfully usurp authority granted to FERC and state Public Service Commissions by the Federal Power Act.

- Through this rule and the Emission Guidelines, the EPA is unlawfully attempting to coerce the states and state legislatures into carrying out federal law in violation of the Tenth Amendment of the United States Constitution.

The Proposal is Too Ill-Defined. Contrary to previous practice, the EPA's proposal does not identify the federal plan and the model trading rules as separate and distinct sets of rules. Instead, the EPA has included in the model trading rules many provisions that do not govern trading. Provisions that appear to be appropriate only in the context of a federal plan operated by the EPA, and not as a part of a state operated trading program, are included as proposed trading rules for states. Instead of promoting clarity for the trading program, this promotes confusion.

Also, the EPA solicits comments on nearly three hundred different topics, establishing far too many variables to constitute a well-defined proposal. The proposal fails to address many critical issues, including, in particular, the Clean Energy Incentive Program (CEIP). A well-defined proposal is crucial for states to be able to formulate meaningful comments. Likewise, a well-defined model final trading is crucial for states to be able to evaluate compliance options. This proposal is actually more of a scoping exercise that might be acceptable as an Advance Notice of Proposed Rulemaking (ANPR), but not as a proposed rule under section 307 of the Clean Air Act. The sheer breadth of unresolved details has deprived states, industry and the public of the opportunity to meaningfully comment on whatever rules the EPA decides to finalize. Because of the proposal's failure to comply with the rulemaking requirements of section 307, the EPA must abandon this rulemaking. If the EPA decides to initiate another attempt at promulgating a federal plan and model state trading rules, it must present a well-defined proposal. At a minimum, this should include separating the federal plan, rate-based trading rules and mass-based trading rules into three distinct proposals.

State Flexibility Needs to Be Preserved. State flexibility needs to be preserved, consistent with the responsibility assigned to states by CAA Section 111(d). Imbedded in the "federal plan" portions of the trading rules are many policy judgments the EPA has made. Certain elements of the Emission Guidelines that are presented as options for states in the EPA's final CPP, such as the CEIP, renewable energy and output-based set-asides, can be read as being mandated for inclusion in state plans by sections of the model trading rules. Because these rules are presented as presumptively approvable parts of a state plan by the EPA, a state that desires to submit an approvable plan that includes trading may feel coerced to adopt the entirety of this set of "trading" rules, including policy judgments the EPA has made (that the state might make differently) on what have been presented as options for states. The EPA needs to affirm the flexibility section 111(d) intends to provide to states is retained. It should make it clear that states have the option to adopt or not adopt each of these potential program elements.

Consistent with the need to give states the flexibility that Clean Air Act Section 111(d) provides, the EPA also must be willing to entertain and approve as part of state plans other measures to ameliorate or control carbon emissions beyond those contemplated in the Clean Power Plan proposed rules. The adoption of a federal plan *template* should not foreclose state flexibility in making choices for reduction of carbon in the atmosphere as part of a state plan.

Establishment of the CEIP Must Be Accomplished Through Rulemaking. The CEIP is established in the final Emission Guidelines, and is an integral part of the proposed federal plan and model rules. Both the rate-based and mass-based approach include requirements relating to the CEIP, but neither proposal sets out the precise requirements of the CEIP. The CEIP needs to be proposed and then promulgated under the Clean Air Act's rulemaking procedure. The EPA's use of a non-regulatory docket in developing the CEIP does not comply with the EPA's obligations under Section 307 of the CAA.

If Established, A Trading Scheme Must Have the Broadest Possible Market. The EPA has acknowledged that a broad trading market provides greater opportunities for cost effective implementation of reductions compared to trading limited to a smaller area. If there is to be trading as a compliance mechanism, trading should take place in the broadest possible trading market in

order to take advantage of economies of scale. Therefore, the rule should not allow states to impose what may be unlawful restraints on interstate commerce by limiting partners with whom trading will be allowed. Also, to ensure the broadest possible market, the EPA should promulgate regulations establishing a nationally consistent correlation between emission reduction credits (ERCs) in rate-based plans and allowances in mass-based plans. With the inclusion of a renewable energy set-aside in a mass-based trading program, the inclusion of the CEIP program based on short tons in the rate-based trading program, and the inclusion of the CEIP program with renewable energy and energy efficiency components in a mass-based trading program, the EPA has already mixed mass- and rate-based compliance approaches. In mixing these approaches, the EPA has acknowledged a correlation between ERCs and allowances can be made. The EPA should broaden the trading market by establishing a means of determining this correlation so trading can take place between rate-based and mass-based compliance markets.

The EPA Lacks Authority to Require States to Address Leakage. Sections 111(b) and 111(d) establish distinct and separate programs for establishment of performance standards for new and existing sources, respectively. A source may be subject to regulation under section 111(b) or section 111(d), but not both. The universe of new sources is regulated under section 111(b) and the universe of existing sources is regulated under section 111(d). In the rules the EPA has established for EGUs, it has reached the curious result of having less stringent emission standards for new natural gas combined cycle (NGCC) units than it has for existing NGCC units. In addition, in a state with a mass-based plan, the emissions from an existing NGCC unit are counted against the state's mass-based limit, but emissions from a new NGCC unit are not. Thus, the EPA's incongruous regulatory structure provides an incentive for electric generation to be shifted from existing to new NGCC units. Having created this problem the EPA calls "leakage" from the universe of 111(d) existing sources to the universe of 111(b) new sources, the EPA now indicates, in preamble language, but not in any proposed rule, that states that choose a mass-based plan must either adopt the "new source complement" or the renewable energy and output-based set asides to address leakage. There are several legal hurdles to the EPAs expectations on leakage: (1) Authority under both 111(b) and 111(d) is limited to establishment of performance standards that apply at a source. Consequences that arise collaterally as a result of the application of the performance standards to sources are beyond the EPA's section 111 authority to address. (2) As stated above, sections 111(b) and 111(d) each apply to distinct and separate groups of sources. The EPA cannot mix the two as it would attempt to do with its discussion of the leakage issue. (3) "Leakage" has not been defined nor has a definition been proposed. Neither have any of the ways of having states address leakage that the EPA has discussed been proposed as regulations. Even if the two legal hurdles raised above did not exist, section 307 of the Clean Air Act requires the EPA to distill its ideas into proposed regulatory text and provide states and the public an opportunity to comment before attempting to establish them as regulatory requirements.

Even If There Were Not Legal Hurdles for the EPA in its Consideration of Leakage, Significant Clarification of this Concept is Needed. Leakage does not appear to be an issue for West Virginia because it does not have any existing NGCC generation (the EPA calculated the output-based set aside for West Virginia to be zero) from which there could be leakage to new NGCC generation. Two other states appear to be in the same position as West Virginia in this regard. The preamble to the proposed rule raises the issue of leakage with respect to a mass-based

approach, yet leakage is not defined anywhere and no requirements related to leakage are proposed in 40 C.F.R. Part 62, Subpart MMM. Based on preamble discussion, we believe that West Virginia and the other similarly situated states do not need to address leakage. However, neither the final Emission Guidelines nor the proposed rules articulate this with any level of certainty. The proposed model trading rules can be read to require a state with a mass-based plan to adopt either the new source complement or the renewable energy and output-based set asides in order to address leakage. The EPA needs to confirm that West Virginia and the other similarly situated states do not have to address leakage.

A Reliability Safety Valve (RSV) is Essential and Must Be Provided. The EPA established the reliability safety valve as the law of the land in the final Emission Guidelines. However, even as the EPA was establishing the RSV, it was proposing in this rule to disregard this necessary measure to ensure the reliability of the grid. Contrary to the EPA's contentions, the opportunity for EGUs to trade ERCs or allowances as a compliance mechanism does not obviate the need for the RSV. Reliability of the nation's power supply is too vital to the national interest for the EPA to disregard reliability in its rules for implementation of the Emission Guidelines.

The EPA Must Provide Adequate Funding and Support For States. In the past few years the EPA has produced a steady stream of new air quality regulations that have greatly increased the burden on the states that are the primary implementers of these regulations. The Clean Power Plan may impose the most significant burden on the states of any of these regulations. In particular, the evaluation, measurement and verification (EM&V) requirements and process for approval of ERCs and CEIP allowances/ERCs will require the creation and staffing of an entirely new unit within state regulatory agencies. The EPA must acknowledge the regulatory burden states are facing and provide adequate funding and support to enable state agencies to implement the CEIP and other new regulatory requirements.

States Should Have Flexibility to Grant Extra Time to Comply. The EPA has requested comment on whether it would be possible to grant on a case-by-case basis certain affected EGUs particularly small entities additional time to come into compliance. The DEP supports this option where appropriate. This is especially true for small entities, such as low volume power producers that support the public good by burning waste fuel, the burning of which provides multiple environmental benefits. Other EGUs may be able to qualify for longer compliance schedules or less stringent standards under 40 C.F.R. § 60.24(f), as well. This flexibility should be preserved.

Comments on Proposed Rule Language

The EPA should consistently define eligible renewable energy resources across rate- and mass-based programs. For example in the mass-based program, eligible renewable energy resources include "onshore utility scale wind, solar, geothermal power or utility scale hydropower" §62.16245. Rate-based eligible renewable energy resources include these sources, plus "wave, tidal; qualified biomass; waste-to-energy (biogenic portion); nuclear energy; a non-affected combined heat and power unit, including waste heat power." §62.16435(a)(4). This is not consistent with the preamble language, 80 Fed. Reg. at 65023. where the EPA states: "We are proposing, as part of the mass-based federal plan and model rule, that a project is eligible to receive set-aside allowances if it is renewable energy that meets the eligibility requirements for rate-based

ERC issuance as specified in section IV.C. of this preamble and section VIII.K. of the final EGs." *Id.* The inconsistency between proposed rule language and statements made in the preamble requires clarification.

Sections 62.16431(b), 62.16431(c), 62.16231(b), 62.16231(d)(2) and 62.16235(e)(2) all pertain to government actions that will affect private rights. Important details establishing the manner in which the government takes these actions are left out in each of these sections. Instead, these sections provide that the government will act "**pursuant to a process to be prescribed by the Administrator**". Rulemaking, not EPA "guidance", is the proper means for establishing such processes in an open and transparent manner, with the opportunity for public input. Proposed rule language should establish these processes. The absence of language establishing these processes is another reason the EPA needs to abandon this rulemaking and, if it then desires to continue to pursue these rules, to propose details of the processes these rules would leave to the Administrator's discretion.

Proposed 40 CFR Part 62, Subpart NNN

The CO_2 emission standards state in §62.16420(c)(2)(iv) that if an affected EGU obtained sufficient facially valid ERCs to meet its emission standard, but those ERCs were later found to be invalid, then it may be subject to federal enforcement. The EPA is proposing elaborate requirements for eligible resources and independent verifiers as well as the process for approval of ERCs in this proposal. An entirely new bureaucracy must be created with extensive requirements for decision making, tracking, evaluation, measurement and verification. If an EGU purchased an ERC produced by this extensive new EPA-approved ERC bureaucracy in good faith, it should not later be subject to punitive enforcement action for failure to hold sufficient ERCs if that ERC is negated.

Proposed 40 CFR Part 62, Subpart MMM

The proposed rule language in §62.16235(e)(1) contradicts both the final Emission Guidelines and the preamble of the proposed rule when it states: "(t)he Clean Energy Investment Program Set-Aside for **each State covered under this subpart must** contain an amount of allowances shown in Table 4 of this subpart, which must reserve a share of the State's annual allowances prior to allocation of that year's allowances to facilities as set forth in this paragraph" (emphasis added). As written, this proposed requirement applies to all states subject to the mass-based trading rule. The final Emission Guidelines allow states the option of participation in the CEIP, but do not require their participation in the CEIP. In the preamble, the EPA proposes to implement the CEIP set-aside "only for those states for whom the EPA is implementing the mass based federal plan," 80 Fed. Reg. 65025, and also proposes that "a state that chooses to replace the federal plan allocations with a state-determined approach must include a CEIP set-aside" 80 Fed. Reg. 65026. The flexibility states are supposed to have to decide to take the CEIP or leave it must be preserved.

Comments on Technical Support Documents

The IPM modeling NEEDS database file, "needs_v515.xls" (available at http://www.epa.gov/airmarkets/power-sector-modeling-platform-v515), tab titled "NEEDS 5.15_Active" does not include Mitchell Unit 2, UniqueID Final: 3948_B_2. It is instead listed in the tab titled "NEEDS 5.15_Retired_by2016." Mitchell Unit 2 was not retired in 2013 (as reported in the spreadsheet), and is not scheduled to be retired. Mitchell Unit 2 is a 790 MW coal-fired unit which was equipped with a wet scrubber in late 2006 and an SCR in 2007. Mitchell Unit 2 should be retained as an active unit in the NEEDS database.

The TSD spreadsheet titled "tsd-cpp-emission-performance-goal-computation-appendix-1-5.xlxs" (available at http://www.epa.gov/cleanpowerplan/clean-power-plan-final-rule-technical-documents), Rivesville, ORIS Code 3945, Generator ID 5 (Unit 7) is identified as having 2,169.60 tons of CO_2 emissions in 2012. As reported to the Clean Air Markets Division (CAMD) of the EPA, Rivesville Unit 7 did not operate in 2011 or 2012 and only had 494 tons of CO_2 emissions in 2010. The data for Rivesville, Unit 8 (Generator ID 6) is correct based on data reported to CAMD. (CAMD data is available at http://ampd.epa.gov/ampd/.) Although Generator ID is not provided in the Air Markets Program Data (AMPD) reports, Generator 5 corresponds to Unit 7, and Generator 6 corresponds to Unit 8.

Morgantown Energy (ORIS 10473) Correction

The Morgantown Energy facility (ORIS ID 10473) in Morgantown, West Virginia is a cogeneration plant which is subject to the rule, and sells steam to West Virginia University (WVU). There are discrepancies in the method of calculation of total energy output, CO_2 emissions and CO_2 emissions per MWh at the Morgantown facility available on the EPA's web-based Clean Power Plan toolbox, at the link titled "Clean Power Plan Goal Visualizer." [http://www.epa.gov/cleanpowerplantoolbox] Specifically, the steam sold to WVU was not accounted for in the method of calculation for the total energy output and the CO_2 emissions and emission rate do not reflect reported emissions for the facility. A discussion of the discrepancies, along with the correct calculation method per the rule is detailed below. We request that the EPA take into account the corrected numbers.

The total net energy output was calculated using the equation provided in 40 CFR 60.5860(a)(5)(iv):

$$P_{net} = \frac{(Pe)_{ST} + (Pe)_{CT} + (Pe)_{IE} - (Pe)_{A}}{\text{TDF}} + [(Pt)_{PS} + (Pt)_{HR} + (Pt)_{IE}]$$

The terms in this equation which are relevant to the Morgantown facility are: P_{net}, the energy output in MWh; $(Pe)_{ST}$, the electric energy output plus mechanical energy output of steam turbines in MWh; TDF, which equals 0.95 for a combined heat and power plant where at least on an annual basis 20% of the total or net energy output consists of electric or direct mechanical output and 20% of the total net energy output consists of useful thermal output on a 12-operating month basis; and $(Pt)_{PS}$, the useful thermal output of steam in MWh. 40 CFR 60.5860(a)(5)(v) provides an equation to calculate the $(Pt)_{PS}$ term:

$$(Pt)_{PS} = \frac{Q_m \times H}{CF}$$

Where Q_m is the measured steam flow in pounds, H is the enthalpy of the steam in Btu/lb, and CF is a conversion factor of 3.413 x 10^6 Btu/MWh. The following calculations show the Morgantown facility's net energy output, using the formulas provided in Subpart UUUU and process data from 2012.

$$(Pt)_{PS} = \frac{669{,}805{,}000\ lbs \times 1{,}263.60\ \frac{Btu}{lb}}{3.143 \times 10^6\ \frac{Btu}{MWh}} = 247{,}983\ MWh$$

$$P_{net} = \frac{408{,}719\ MWh}{0.95} + 247{,}982\ MWh = 678{,}212\ MWh$$

According to the *CO_2 Emission Performance Rate and Goal Computation Technical Support Document for CPP Final Rule*, (See Appendix 9, page 33) [available at http://www.epa.gov/sites/production/files/2015-11/documents/tsd-cpp-emission-performance-rate-goal-computation.pdf] which details the sources of data used by the EPA for rulemaking, CO_2 emissions for sources not subject to Acid Rain Provisions of 40 CFR Part 75 (which includes the Morgantown facility) are obtained from the EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2012, and emission factors from 40 CFR Part 98. The data from the Clean Power Plan Toolbox provides CO_2 emissions from the Morgantown facility at 714,917 tons. However, data from the EPA's Greenhouse Gas Reporting Program (GHGRP) [available from the "Facility Level Information on GHGs Tool (FLIGHT)" at http://www.epa.gov/ghgreporting] shows that 608,864 metric tons, or 671,158 short tons of CO_2 were emitted at the Morgantown facility in 2012. The data from the EPA's GHGRP matches facility submittals, therefore 671,158 short ton of CO_2 emissions should be used by the EPA.

Using these values, an updated CO_2 emission rate was calculated and compared to the value in Column AB of the "Appendix 1 – All Units (2012)" tab in the State Goal Visualizer spreadsheet.

$$CO_2\ Emission\ Rate\ \left(\frac{lb}{MWh}\right) = CO_2\ Emissions\ (ton) \times \frac{2{,}000\ lbs}{1\ ton} \div P_{net}\ (MWh)$$

$$CO_2\ Emission\ Rate = 671{,}158\ tons \times \frac{2{,}000\ lbs}{1\ ton} \div 678{,}212\ MWh = 1{,}979.20\ \frac{lb}{MWh}$$

This value is approximately 43% of the emission rate of 3,498 lb/MWh provided in the Goal visualizer spreadsheet. Because the updated data reflects the facility reported data, and publically available date, the calculated value of 1,979.20 lb/MWh should be used for the Morgantown facility by the EPA for the 2012 emissions data.

Conclusion

For many reasons, this proposal is unlawful, both on its own and as a part of the EPA's effort to implement its unlawful Emission Guidelines. Accordingly, the EPA must abandon it. When the EPA undertakes any rulemaking under the Clean Air Act, it is obligated to have sufficiently distilled its ideas into proposed regulatory text to enable commenters to provide meaningful input. The EPA has failed to meet this obligation with this proposal. If the EPA insists on proceeding with rulemaking of this nature, it must start over with a specific detailed proposal. Should the EPA decide not to take either of these courses of action, at a minimum, it must correct its proposal to address the comments made above.

If you have questions or concerns regarding this submittal or require additional information, please contact William F. Durham, Director of the Division of Air Quality at (304) 926-0462.

Sincerely,

Randy C. Huffman
Cabinet Secretary