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October 31, 2018

# State of New Mexico ENVIRONMENT DEPARTMENT

Office of the Secretary

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Mr. Andrew Wheeler EPA Acting Administrator U.S. Environmental Protection Agency Mail Code: 28221 T 1200 Pennsylvania Avenue NW Washington, DC 20460

> Re: Comments on Proposed "Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to the Emission Guideline Implementing Regulations; Revisions to New Source Review Program" – Docket ID No. EPA-HQ-OAR-2017-0355

Dear Mr. Wheeler:

The New Mexico Environment Department appreciates the opportunity to comment on EPA's Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units and the Proposed Revisions to the Implementing Regulations and New Source Review Program. However, we are deeply concerned that only 61 days were allowed to comment on this complex proposal. Comprehensive outreach and coordination with stakeholders is vital to the success of the eventual Final Rule; when calls for extension of time to comment are not heeded, comments may be technically insufficient or lacking in meaningful detail and substance.

Although the Department has not had adequate time to conduct a thorough analysis of these proposals, we have enclosed the technical comments that we were able to put together based on our limited review. These comments are not exhaustive, and silence on a given issue does not imply concurrence with EPA's proposed position. Additionally, these comments do not necessarily reflect the position of other agencies or offices of the State of New Mexico.

Sincerely,

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Enclosure: Technical comments from New Mexico Environment Department

# New Mexico Environment Department Technical Comments to the U.S. Environmental Protection Agency "Affordable Clean Energy" Proposal October 31, 2018

Docket ID No. EPA-HQ-OAR-2017-0355 83 Federal Register 44746

Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program – Proposed Rule

## 1. Overarching Concerns

- a. The New Mexico Environment Department (NMED) has serious concerns over the extremely abbreviated comment period for such a complex, farreaching Proposed Rule. The Proposed Rule makes sweeping changes that will have a significant impact on state regulatory programs and staff resources. The lack of meaningful engagement with states and other stakeholders is an ongoing concern for many agencies, and we strongly urge EPA to consider providing additional time to provide comments on the three proposals contained in this Proposed Rule.
- b. EPA should consider the three proposals as separate rulemakings. (See request for comment C-71) While the three proposals are related, they each warrant separate consideration as implementation of such proposed rules would have far-reaching consequences. States and other stakeholders have been given little time to consider those consequences, which are nuanced yet have the potential to affect sources beyond those subject to this proposal. The Proposed Rule seeks to make major revisions to the New Source Review (NSR) permitting program and to the implementing regulations for Clean Air Act (CAA) Section 111(d), both of which are well established. Any proposed revisions to those programs should separately undergo extensive analysis, outreach, and public comment consideration, so as not to overlook the potential broad and significant consequences. The existing NSR program, including the complicated Prevention of Significant Deterioration (PSD) regulations, requires intense and thorough analysis since changes to these regulations are rarely simple.
- c. EPA should consider the costs to States, Tribes, and Local Agencies in implementing a rule which, by its own modeling, shows only slight reductions

**in greenhouse gas emissions.** The rule, by EPA's own estimates for the 4.5% Heat Rate Improvement (HRI) at \$50/kW ACE case, show only 0.8% lower CO<sub>2</sub> emissions in 2030 compared to no policy. Many agencies, including NMED, have limited resources with which to plan and implement federal regulations. Therefore, we must prioritize those regulations which will have a positive impact on our environment and on our citizens' health and welfare. For such a limited benefit, this rule would not likely be a priority for NMED. The citizens of New Mexico and the United States would be better served by a rule which results in better environmental outcomes. Some suggestions follow in other comments.

d. NMED strongly urges EPA to consider environmental justice concerns in this proposed rulemaking. The Proposed Rule would allow subject fossil fuel-fired Electric Generating Units (EGUs) to increase their annual operating hours or to extend their useful life, resulting in increased emissions of other regulated air pollutants. Thus, environmental justice concerns and potential health and ratepayer impacts to low income or minority residents should be included as a requirement of a final rule. If an area surrounding an EGU is of concern due to a relatively high percentage of low income or minority residents, States, Tribes, or Local Agencies (STLAs) should be required to consider in their plans how the potential impact from increased emissions or increased rates for these citizens could be mitigated.

#### 2. <u>BSER</u>

a. The Proposed Rule appears to redefine "standard of performance" while simultaneously claiming to return to the "historical understanding and practice" of BSER. (See request for comment C-2) NMED notes that it is inconsistent with past practice to consider historical perspectives for defining BSER but not for CAA Section 111(d) precedents. Historically, EPA has set a level of emissions in rulemakings under Section 111(d) based on BSER. Existing sources that emit pollutants above the established level must install controls or modify operating practices to reduce emissions. This proposal would put the onus on STLAs to set the level of emissions in 111(d) rulemakings, claiming that this is the true meaning of "standard of performance." Not only is this an unreasonable burden for STLAs to bear, but it will create a patchwork of different standards across the country. Standards of Performance should be both consistent and consistently applied national standards. Source-by-source "standards" are simply permit conditions. A reasonable interpretation is for the EPA to set the emissions level above which sources must install controls (or modify operating practices),

then require states to develop plans for implementing the emission guidelines. This approach is consistent with other rules under Section 111(d).

- b. The Proposed Rule establishes applicability criteria to include a variety of fossil fuels yet sets BSER based solely on HRIs at coal-fired power plants. (See requests for comment C-3, C-5 and C-11) To effectively reduce emissions of greenhouse gases, BSER should be identified and required for all fossil fuel-fired EGUs. NMED suggests that EPA initiate a formal information request from STLAs and industry regarding improvements that could be made at all fossil fuelfired power plants. New Mexico has experience with several adequately demonstrated systems of greenhouse gas emissions reductions for natural gasfired stationary combustion turbines and boilers. For example, improved operations and maintenance practices and closer monitoring of operating parameters are common improvements required through BACT analyses. This may include annual tuning of boilers, installing a neural network with digital controls, limiting air heater leakage, maintaining proper steam temperatures and pressures, and calibrating various components of the combustion system. Again, it is EPA's responsibility to compile the research based on the experience of stakeholders.
- c. EPA should expand the limited list of "candidate technologies." (See requests for comment C-6, C-11, and C-XX (between C-12 and C-13)) The limited BSER "candidate technologies" and accompanying compliance options in the Proposed Rule (limited to those included in the proposed BSER) significantly restrict New Mexico's ability to reduce greenhouse gas emissions. Since the BSER is based on coal-fired power plant HRIs, New Mexico can only apply the BSER to the one coal-fired power plant that will remain in operation by the time the rule would be implemented. Additionally, because EPA seems to want to limit compliance to those technologies that can be implemented and measured at the source, compliance will be costlier for New Mexico than it would have been under the Clean Power Plan, while emission reductions will be minimal given that the State's largest coal-fired power plant is scheduled to be retired before this rule would be implemented. Finally, co-firing should be allowed as an adequately demonstrated measure that can be implemented at the source. According to a study by Resources for the Future using data from the EIA, 35% of coal-fired boilers in 33 states also burned natural gas in 2017, and 2% of coal-fired boilers in 7 states also burned biomass in 2017. While not all coal-fired power plants would be able to implement co-firing, it should be considered as part of BSER.

d. EPA should include all costs in the Regulatory Impact Analysis (RIA), including NSR costs. (See request for comment C-59) While costs of NSR compliance (capital, operating, and retrofit costs) are considered during BACT review, other costs (e.g., consulting and permit fees) are not considered in the development of air quality regulations. The Proposed Rule should make this clear. To allow all costs, including fees, in a rule that applies only to coal fired power plants would be unprecedented, arbitrary and capricious. While costs of compliance should be included in the RIA, it should be noted that NSR compliance costs are expected as part of doing business and are not overly burdensome to industry.

#### 3. The "Rebound Effect"

- a. Increased generation leading to increased annual and lifetime emissions should be prohibited. (See requests for comment C-9, C-65, C-66 and C-70) The goal of Section 111(d) is to reduce emissions from existing sources. A decomposition analysis of the emissions projections in the ACE RIA completed by Resources for the Future found the following:
  - i. National power sector CO<sub>2</sub> emissions would decrease by 14.3 million short tons in 2030 compared to no policy.
  - ii. Greater utilization of coal, however, would result in an emissions increase of 32.4 million short tons as the result of heat rate improvements.
  - iii. Eighteen (18) states plus the District of Columbia would realize an estimated increase of an estimated 21.4 million short tons of CO<sub>2</sub> as a result of increased utilization of fossil fuels.

This is an unacceptable result of the ACE proposal. This can be avoided, however, by prohibiting increased generation through changes in the traditional NSR permitting program. (See additional comments regarding the proposed NSR changes below.)

b. EPA should maintain a nationally consistent NSR program and should not allow the option to change the NSR permit program on a STLA basis. (See requests for comment C-65 and C-70) Greenhouse gases have a global, long-term, chronic effect, as opposed to a short-term acute effect. Reducing short-term greenhouse gas and co-generated pollutant emission rates while increasing annual rates is counterproductive. Allowing an increase in regulated air pollutants without completing a PSD ambient impact analysis on the National Ambient Air Quality Standards (NAAQS) and PSD Increments would interfere with NMED's ability to manage air resources. New Mexico currently has 13 ozone monitors whose design values are approaching the 2015 ozone NAAQS, so the reduction of

ozone precursors is of primary concern of New Mexico. If sources are allowed to bypass well established NSR requirements, it will likely result in nonattainment of the 2015 ozone NAAQS in many areas of the State. In addition, an increase in annual emissions from coal-fired electric generating units may impede New Mexico's progress towards Visibility Protection.

### 4. NSR Changes

a. New Source Review permitting requirements are not an impediment to improvements at fossil fuel-fired power plants. (See request for comment C-66) Congress' intent in listing large power plants as one of the 28 major emitting source types under the 1977 CAA was to "identify facilities which, due to their size, are financially able to bear the substantial regulatory costs imposed by the PSD provisions and which, as a group, are primarily responsible for emission of the deleterious pollutants that befoul our nation's air." Alabama Power Co. v. Costle, 636 F.2d 323, 353 (C.A.D.C.1979). Permit fees are set to allow SIPapproved States to operate their permitting programs. They are not an impediment to improvements at fossil fuel-fired power plants.

NSR time requirements are similarly not onerous in New Mexico: minor source permits are granted or denied within 90 days of an application being ruled administratively complete, and PSD permits are granted or denied within 180 days of an application being ruled administratively complete. Power plants may experience a shorter processing time than other sources because they are usually one of the simplest types of sources to process through PSD. Many sources choose to install controls or change their methods of operations to avoid PSD or Title V major source permitting.

b. Allowing states the option of applying an hourly emissions test (rather than applying an annual test) to only Electric Generating Units (EGUs), and especially to a small subset of these EGUs, is arbitrary and capricious and gives an unfair economic advantage to those sources. (See requests for comment C-61 and C-62) The Proposed Rule seeks to restrict BSER to HRI and to apply the PSD applicability test to a small subset of sources that are subject to the Proposed Rule. Many of these sources are defined as major emitting sources pursuant to Section 169 of the CAA. The Proposed Rule seeks to exempt a subset of EGUs from NSR requirements, regardless of whether the emission rates of pollutants increase on an annual basis. PSD applicability steps apply to increases of tons of emissions, based on a 24-month average. This makes intuitive sense, considering that degradation of the environment is a long-term concern, not an

hourly concern. As stated above, under the Proposed Rule, many sources would likely emit more over the course of a year and the sources lifetime. Allowing this subset to emit more, while other sources cannot (without incurring NSR/PSD requirements) is arbitrary and capricious. It would also create an economic advantage for the larger sources, some of which are major emitting facilities, which would be subject to this Proposed Rule.

c. EPA should not allow an hourly emissions test for EGUs to determine NSR or PSD review requirements. (See requests for comment C-63, C-66 and C-67) This proposed allowance would significantly impact SLTAs' ability to prevent deterioration in areas designated in attainment of the NAAQS and in Class I Areas – both within and outside of their own jurisdictions. As explained in the memorandum of Don R. Clay, Acting Assistant EPA Administrator for Air and Radiation (Sept. 9, 1988):

"When plans to increase production rate or hours of operation are inextricably intertwined with the physical changes planned, they are precisely the type of change in hours or rate of operation that would disturb a prior assessment of a source's environmental impact and should have to undergo PSD review scrutiny.

True, the 1980 PSD regulations may be no seamless narrative, but they clearly do not define a major modification in terms of an increase in the hourly emissions rate. On its face, the definition in the PSD regulations specifies no rate at all, hourly or annual, merely requiring a physical or operational change that would result in a significant net emissions increase of any regulated pollutant [pursuant to 40 CFR §51.166(b)(2)(i)]. But even when a rate is mentioned, as in the regulatory definitions of the two terms, significant and net emissions increase, the rate is annual, not hourly. Each of the thresholds that quantify significant is described in tons per year."

The PSD program uses annual Class I and II increments as a measure to prevent deterioration of air quality and to reserve air quality resources for future economic development. Changing the definition of emissions increase to focus only on an hourly rate puts these protections in jeopardy. Further, redefining or reinterpreting regulatory definitions for the purpose of avoiding PSD review for a small subset of sources would be arbitrary and capricious. Changing the meaning of terms

would likely not correspond with Congress' original intent when enacting the CAA.

#### 5. Compliance Flexibility

- a. EPA should not limit compliance options to only those that can be implemented at the source and that are measurable at the source. (See request for comment C-17) The responsibility of EPA is to set a reasonable emissions limitation that sources would be required to meet. How they meet that limitation should be left up to the source and STLAs. If a source chooses an action outside of the BSER, or even outside of its boundaries, which causes emissions to decrease, why should this option be disallowed? These types of decisions are typically economic in nature, so operating a high-emitting resource less to reduce emissions should be allowed. (This is further justification for using an annual emissions rate to determine whether a source has a net emissions increase.) EPA has claimed that it is promoting "cooperative federalism." Yet, the Proposed Rule severely restricts the choices STLAs and sources have for achieving emissions reductions. This is detrimental to achieving the goal of reducing emissions at a reasonable price. Sources should be free to reduce operations, install controls, switch fuels, co-fire or order their dispatch according to what works best for them and the customers they serve.
- b. EPA should allow facility-wide averaging, but only for units that have not been formally retired prior to the effective date of a final rule; averaging should also be allowed between affected fossil fuel-fired EGUs and non-emitting sources. (See requests for comment C-80 through C-85) Facility-wide averaging should be allowed so that EGU owner/operators do not have separate emissions limitations for individual units within a facility. This concept, Actuals Plantwide Applicability Limits (PALs), is an existing option in the PSD rules. Allowing for averaging across units and increased compliance flexibilities will help keep costs down. However, a unit that has already formally retired should not be included in the calculation of the baseline actual emissions.

This rulemaking should not be concerned with encouraging generation shifting. Generation shifting has been taking place for many years and is a well-established option for many EGU operators/owners. The potential generation shift is not mandated; it is an option. EPA should not be in the business of telling sources that this option is not allowed. This is a decision that should be left to EGU owners/operators. For this reason, averaging (both before and after implementation of a final rule) should be allowed.

### **Conclusion**

**EPA should follow through on its promise of increasing cooperative federalism.** This includes allowing STLAs (working with their affected sources and other stakeholders) to provide as many compliance options as possible while simultaneously helping STLAs to meet other air quality obligations, such as the improvement of air quality in nonattainment areas, preservation of air quality in attainment or unclassifiable areas, and protection of visibility in Class I Areas. Further, STLAs should have more input (and adequate time) regarding large programmatic changes that will impact their programs. This Proposed Rule would limit compliance options and would work against STLAs' goals of protecting air quality for their citizens.