

45CSR44
CONTROL OF GREENHOUSE GAS EMISSIONS
FROM EXISTING COAL-FIRED ELECTRIC UTILITY GENERATING UNITS
RESPONSE TO COMMENTS

The West Virginia Department of Environmental Protection (DEP), Division of Air Quality (DAQ) commenced the public comment period for proposed legislative rule 45 C.S.R. 44 on June 26, 2020. The public comment period concluded July 28, 2020 after satisfying the minimum 30-day period. The public hearing was held virtually to prevent the spread of COVID-19 in accordance with the Governor's Safer at Home Order and the DEP COVID-19 Policy on July 28, 2020, to accept oral and written comments on the proposed revisions to legislative rule 45CSR44. Any comments received after this time are considered ex parte communications and cannot be considered in accordance with West Virginia Code Chapter 29A Article 3.

Four written comments were received for the proposed revisions to rule 45CSR44 and four attendees provided verbal comments during the public hearing. Three of the written comments were also provided verbally during the public hearing. A summary of the written and oral comments received are provided below along with the response to each comment. The original written comments and the public hearing transcript are provided as part of the formal rulemaking record.

In alphabetical order, comments were received by: Aileen Curfinan [AC] (written and verbal comments); James Kotcon, Conservation Chair of WV Chapter of Sierra Club [SC] (written and verbal comments); Angie Rosser, Executive Director of West Virginia Rivers Coalition [WVRC] (verbal); Scott Weaver, Director of Air Quality Services at American Electric Power Corporation [AEP] (written); and David White, Appalachian and Atlantic Defense Council [AADC] (written and verbal).

The table below lists changes that were made to 45CSR44 as a result of the comments. The details of the change are provided within the response to the specific comment.

45CSR44 Section	45CSR44 Section Title	Comment & Response Number
5.1	Permit requirements, standards of performances and compliance periods	14
1.1.c	Scope	21
2.24	Definition of greenhouse gas	22
2.18	Definition of designated pollutant	23
2.25	Definitions of heat rate	23
5.4	Permit requirements, standards of performance and compliance periods	23
4.2	Permit application requirements	27
5.4	Permit requirements, standards of performance and compliance periods	31

Commenter 1 [AADC] - David White, Appalachian and Atlantic Defense Council

COMMENT 1 [AADC]: Gutless Folly. A nothing burger. By design, of course. Why even add pretense to the farce by calling the proposed 45CSR44 Control of Greenhouse Gas Emissions, since clearly it does not propose to control anything? 'Heat rate improvements which target achieving lower carbon dioxide emission rates at designated facilities.' Neural network and intelligent sootblowers, boiler feed pumps, air heater and duct leakage control, variable frequency drives, blade path upgrades, economizer redesign or replacement and improved operating and maintenance practices. These are process operating improvements. If West Virginia's fleet of coal-fired power plants can achieve carbon dioxide (CO₂) emission rate reductions by these trivial maintenance and operational improvements, then the end must be near for them already. So, there is the silver lining.

RESPONSE 1: In the federal emission guidelines published at 84 Fed. Reg. 32520 (July 8, 2019), the U.S. Environmental Protection Agency (EPA) states that it is the responsibility of the U.S. EPA to establish the Best System of Emission Reduction (BSER). The U.S. EPA determined that heat rate improvement (HRI) is the BSER for existing coal-fired electric utility generating units (EGUs)¹ and provides the following background:

Heat rate is a measure of efficiency that is commonly used in the power sector. The heat rate is the amount of energy or fuel heat input (typically measured in British thermal units, Btu) required to generate a unit of electricity (typically measured in kilowatt-hours, kWh). The lower an EGU's heat rate, the more efficiently it converts heat input to electrical output. As a result, an EGU with a lower heat rate consumes less fuel per kWh of electricity generated and, as a result, emits lower amounts of CO₂—and other air pollutants—per kWh generated (as compared to a less efficient unit with a higher heat rate)².

The U.S. EPA identified a list of “candidate technologies” of the BSER that included technologies, equipment upgrades, and operating and maintenance practices that were deemed most impactful because they can be applied broadly and are expected to provide significant HRI without limitations due to geography, fuel type, and other characteristics.³

Other regulated pollutant emissions regulated by the DAQ at the coal fired EGUs include add-on controls such as scrubbers to control sulfur dioxide; however, there were no add-on pollution control technology identified as meeting the U.S. EPA's criteria of BSER that is adequately demonstrated and broadly achievable for a source category across the county.⁴

COMMENT 2 [AADC]: While West Virginia is drug against its will into the 21st century, new markets and technology are doing what the gutless coal-buoyed administrations would not - make

¹ 84 Fed. Reg. 32535 (July 8, 2019).

² *Id.*

³ *Id.* at 32536.

⁴ *Id.* at 32534.

coal pay for its costs. Good luck reclaiming those open strip jobs and mountaintop removal projects when there's no money to pay anyone to work them. Good luck reversing global impacts of decades of burning coal knowing that we were altering the chemistry of the atmosphere. How's your President and his 'leadership' doing in bringing back coal?

RESPONSE 2: This comment is not germane to proposed rule 45CSR44.

COMMENT 3 [AADC]: There never was any war on coal but there should have been. And there should be now. Even as the impacts of rising atmospheric CO₂ levels and global climate changes are manifesting themselves in real time for all of us to see, here is West Virginia implementing regulations to protect an industry dying of its own weight. For decades, West Virginia could have led, followed or got the hell out of the way, but it didn't. And now it is getting run over. West Virginia still retains a wealthy legacy of natural beauty, resources and proud resilient people. It's time to start working toward a future that protects them all and not the interests profiting from continued coal-fired electric generation.

RESPONSE 3: The DAQ proposed 45CSR44 to establish the permitting and other requirements necessary to implement the federal emission guidelines established at 40 CFR Part 60, Subpart UUUUa, *Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units*. This rule, upon finalization and promulgation, will become part of the State Plan which West Virginia is required to submit to the U.S. EPA under section 111(d) of the Clean Air Act, as amended (CAA), to establish standards of performance for any existing source that the Administrator prescribed regulations, as it did when it published 40 CFR Part 60, Subpart UUUUa on July 8, 2019. Further, 40 CFR § 60.23a(a)(1) requires each State to adopt and submit to the Administrator a plan for the control of the designated pollutant to which the emission guideline applies within three years of the emission guideline being published. This state rule, 45CSR44, is necessary to require designated facilities to submit an air quality permit application to the DAQ such that the standards of performance may be developed and made enforceable when the air quality permit is issued.

COMMENT 4 [AADC]: This proposed regulation is medicine to a dying patient. It is time to move on to renewable sustainable solutions and cease the legislative and regulatory coddling of an industry that has externalize the costs of its global impacts.

RESPONSE 4: The U.S. EPA's Affordable Clean Energy (ACE) rule does not require states to implement alternative renewable energy solutions.

Commenter 2 [AC] - Aileen Curfman

COMMENT 5 [AC]: The intent of 45CSR44 is to revise the DAQ regulations so that they mirror the U.S. EPA's ACE rule. This rule replaces the Clean Power Plan, which the industry challenged, saying that its requirements were too expensive to implement. Economic factors are not supposed to be considered when standards are established, but when the added burden of health care is considered along with other costs, weaker standards do not even make economic sense. In 2017

our rate of chronic lower respiratory disease was the fourth highest in the nation. We should be looking to reduce that cost.

RESPONSE 5: The intent of the proposed new rule 45CSR44 is to adopt the U.S. EPA's Affordable Clean Energy rule, established at 40 CFR Part 60, Subpart UUUUa. At the federal level, the Clean Power Plan was repealed in the same regulatory action in which the ACE rule was finalized. 84 Fed. Reg. 32520 (July 8, 2019). The DAQ did not propose a state rule to implement the Clean Power Plan that was published October 23, 2015, became effective December 22, 2015, and was stayed by the U.S. Supreme Court on February 9, 2016.

Section 111 of the CAA addresses standards of performance for new and existing stationary sources. This section of the CAA does include cost consideration in the development of the standard, as defined below for this section:

The term "standard of performance" means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated⁵.

The West Virginia Code prohibits the DAQ from promulgating legislative rules any more stringent than any federal rule or program except under limited circumstances⁶.

COMMENT 6 [AC]: The Affordable Clean Energy rule fails to address the increasingly urgent costs of ignoring climate change, which is already contributing to floods, wildfires, and severe weather events. Within our grandchildren's lifetime, climate change, if unabated, will create an Earth where human life will be at best difficult to sustain.

RESPONSE 6: The DAQ does not have authority over the federal ACE rule finalized by the U.S. EPA. The DAQ is, however, required to adopt the ACE emission guidelines finalized by the U.S. EPA and submit the implementation of the emission guidelines in a State Plan to the U.S. EPA.

COMMENT 7 [AC]: The ACE rule does not support the U.S. EPA's responsibility to mitigate the effect of greenhouse gas emissions, and it does not fully comply with the Clean Air Act, which specifies that performance standards for existing sources of air pollution must reflect the emissions reductions that can be achieved through application of the "best system of emission reduction" for the pollutant and the source. The BSER is based on three components: (1) heat-rate improvements at coal-fired power plants, (2) increased utilization of natural gas combined cycle units, and (3) increased use of renewable energy. However, the ACE rule addresses only the first of these three components. The reduction in emissions is small—only about 1/1000th of national emissions by the year 2050.

⁵ 42 U.S.C. 7411(a)(1).

⁶ W. Va. Code § 22-5-4(a)(4).

RESPONSE 7: In the federal ACE Rule emission guidelines published at 84 Fed. Reg. 32520 (July 8, 2019), the U.S. EPA determined that HRI is the BSER for existing coal fired EGUs.⁷ The Clean Power Plan that defined BSER as the three building blocks described in the comment was repealed in the same regulatory action in which the federal ACE rule was finalized⁸. As previously mentioned, the DAQ does not have any authority in the development or content of the federal emission guidelines; however, it is required to implement the federal emission guidelines and submit a State Plan to the U.S. EPA.

COMMENT 8 [AC]: The ACE rule is limited to CO₂ emissions. Ozone, methane, and other significant greenhouse gases are ignored. Emissions of sulfur dioxide (SO₂) and nitrogen oxide (NO) are estimated to increase under the Affordable Clean Energy rule, which will encourage additional use of coal due to its reliance on heat-rate improvements.

RESPONSE 8: Proposed rule 45CSR44 adopts the federal emission guidelines of the ACE rule and regulates greenhouse gas emissions, in the form of carbon dioxide from existing coal fired EGUs. In the final federal counterpart rule, the U.S. EPA explains this decision as follows:

The air pollutant regulated in this final action is GHGs. However, the standards in this rule are expressed in the form of limits solely on emissions of CO₂, and not the other constituent gases of the air pollutant GHGs. The EPA is not establishing a limit on aggregate GHGs or separate emission limits for other GHGs (such as methane (CH₄) or nitrous oxide (N₂O)) as other GHGs represent significantly less than one percent of total estimated GHG emissions (as CO₂equivalent) from fossil fuel-fired electric power generating units. Notwithstanding the form of the standard, consistent with other EPA regulations addressing GHGs, the air pollutant regulated in this rule is GHGs⁹.

The heat rate improvements identified as BSER target achieving lower CO₂ emission rates at the designated facilities; however, the coal-fired power plants are required to comply with multiple federal and state regulations and air quality permit requirements that include emissions limitations for all regulated pollutants, including but not limited to volatile organic compounds (VOCs), sulfur dioxide (SO₂), and nitrogen oxides (NO_x). VOCs and NO_x are precursor pollutants to ozone formation.

COMMENT 9 [AC]: Under the ACE rule, performance standards would be set by the owner or operator of the source facility. The rule does not provide criteria that the facility must meet. The operator sets the facility's schedule for attaining compliance with the operator's own standards. There is no deadline, no guidelines or benchmarks are provided to assist the operator's evaluation of progress toward attainment.

⁷ 84 Fed. Reg. 32535 (July 8, 2019).

⁸ *Id.* at 32520.

⁹ *Id.* at 32534.

RESPONSE 9: Please refer to RESPONSE 10 below.

COMMENT 10 [AC]: The proposed DAQ rule, 45CSR44, mirrors the ACE rule and has the same unacceptable shortcomings. Adoption of this rule will be ineffective in slowing the disastrous effects of climate change. In West Virginia, short term effects will also be undesirable and costly. People who suffer from diseases such as asthma and COPD are depending on the DAQ to ensure air quality that is not injurious to their health. The DAQ must reject the weak standards of the ACE rule and join the many states that are maintaining standards that protect the health and safety of the people, both in the short term and for generations to come.

RESPONSE 10: The DAQ is obligated under the CAA to implement the federal emission guidelines and submit a State Plan to the U.S. EPA for approval. If the State Plan is not approvable, the U.S. EPA has the authority to require the state to comply with a federal plan. The West Virginia State Code prohibits the DAQ from promulgating legislative rules any more stringent than any federal rule or program except under limited circumstances¹⁰.

Proposed DAQ rule, 45CSR44 is the first step in the State Plan process to require designated facilities to submit a permit application meeting the requirements established in the federal ACE emission guidelines. The purpose of 45CSR44 is to establish the applicability criteria, permit application requirements, permit requirements, standards of performance requirements, and monitoring, recordkeeping and reporting requirements for designated facilities to control carbon dioxide emission rates based on the heat rate improvements analysis that can be applied to or at the affected steam generating unit. Upon finalization, 45CSR44 will require the owner or operator of each affected EGU to submit a complete air quality permit application within 120 days of the rule's effective date.

The DAQ will establish a standard of performance for each affected EGU based on the HRI analysis as a requirement in an air quality permit issued pursuant to the finalized 45CSR44. Likewise, the compliance period, compliance requirements, monitoring, recordkeeping, and reporting requirements will be established in an air quality permit and will be enforceable under West Virginia State Code.

The deadline to submit a complete air quality permit application to the DAQ is 120 days after the effective date of final rule 45CSR44. All compliance deadlines will be established in the air quality permit issued by the DAQ. Any compliance date that falls beyond two years from the date the State Plan is due to the U.S. EPA will require a compliance schedule with legally enforceable increments of progress, such as a consent order, to monitor progress toward final compliance. Possible reasons for a longer compliance date could include awarding of equipment contracts or construction activities to install heat rate improvement projects.

¹⁰ W. Va. Code § 22-5-4(a)(4)

Commenter 3 [AEP] - Scott Weaver, Director of Air Quality Services at American Electric Power Corporation

COMMENT 11 [AEP]: The proposed rule would impose additional permitting requirements and emission limitations on these units, in accordance with the emission guidelines promulgated by the U.S. EPA in 40 CFR Part 60, Subpart UUUUa, and allow the West Virginia Department of Environmental Protection to establish unit-specific performance standards for each affected source.

The technical basis of U.S. EPA's emission guidelines is a set of potential heat rate improvement opportunities that may improve the efficiency of specific types of equipment that are typically used in coal-fired electric generating unit designs. Not all of the EGUs in West Virginia share the same design, and some of the units do not have the type of equipment included in U.S. EPA's "best system of emission reduction" (BSER) or have already taken advantage of these or other opportunities to improve overall unit efficiency. Therefore, the DEP, as the permitting authority in the State of West Virginia, is charged with exercising its authority to identify applicable technologies for individual units, using the ranges provided in U.S. EPA's guidelines and other information about that specific source to estimate the heat rate improvements that might be achieved through application of those technologies at the unit, and establishing a standard of performance that the unit must meet. The DEP's determination does not require that any specific technology be implemented by the owners and operators of the units, it only establishes the standard of performance for the unit based on the applicable BSER measures.

RESPONSE 11: No response required.

COMMENT 12 [AEP]: The proposed rule reflects the DEP's choice to implement these requirements through a permitting exercise, and establishes application requirements for the effected sources, a timeline for permitting, the content of permits, monitoring, recordkeeping and reporting requirements, and a means of reconciling inconsistencies between the proposed rule and any other applicable rule. There is also a provision allowing for termination of a permit if U.S. EPA's rule is invalidated or withdrawn.

RESPONSE 12: No response required.

COMMENT 13 [AEP]: The U.S. EPA's guidelines include certain information requirements that were held over from an earlier standard that has since been repealed, which are included in 45 CSR § 44-4.9.a. Both rules require submission of such information only if it is applicable and necessary to establish a standard of performance. In many instances, this information is not necessary for that purpose, and due to the projected nature of the information, it is typically considered highly confidential by unit operators. Other elements of the analyses required to be submitted by owners and operators are also considered highly confidential, and would provide competitors, including independent power producers who participate in the capacity and energy markets in multiple regional transmission organizations. Our understanding is that the agency intends to make available all of the protections offered by its general provisions governing confidential business

information in 45CSR31 to assure that such information, if required to be submitted, can be designated as confidential information and protected from public dissemination or disclosure.

RESPONSE 13: Information that the unit operators deem as business confidential should be submitted to the DAQ in accordance with 45CSR31, *Confidential Information* when the permit application is submitted. The agency intends to make available the protections offered under 45CSR31 for confidential information received according to legislative rule 45CSR31 and interpretive rule 45CSR31B, *Confidential Business Information and Emission Data*. If any unit operator has specific questions regarding this process, they are urged to contact the agency prior to submitting the permit application.

COMMENT 14 [AEP]: AEP is concerned that the prohibition in 45 CSR § 44-5.1 contains no effective date. This provision prevents the operation of an affected unit if no permit is obtained, but should not be effective prior to the U.S. EPA's approval of the state's plan. AEP suggests that this provision be re-written with an introductory clause to that effect.

RESPONSE 14: 45 CSR §44-5.1 was revised as follows:

5.1. After U.S. EPA's approval of a comprehensive West Virginia State Plan, no person may operate any affected steam generating unit meeting the applicability requirements set forth in section 3 without obtaining a permit in accordance with this rule and the procedural requirements of 45CSR13.

Commenter 4 [SC] - James Kotcon, Conservation Chair of WV Chapter of Sierra Club

COMMENT 15 [SC]: The Sierra Club is opposed to the proposed 45CSR44 rule. This proposed rule falls short in several important ways and should be amended to fully comply with the Clean Air Act. This rule is so bad that attorney generals from over 20 states, various cities, and numerous other organizations are appealing the U.S. EPA ACE rule. It's so bad that I think the very excellent staff at DAQ must be truly embarrassed to propose such a nothingburger of a rule.

RESPONSE 15: No response required.

COMMENT 16 [SC]: In particular, the proposed rule, like the U.S. EPA ACE rule on which it is based, fails to adequately address climate change, the very reason for the rule's existence. The emissions reductions that would be achieved are negligible, and fail to protect the health of West Virginians, and the health of our environment. It is becoming increasingly evident that the climate crisis is much more serious than was believed even a few years ago and requires rapid reductions in greenhouse gas emissions. Emissions of greenhouse gases are cumulative, and delays today mean we must take much more draconian steps in the near future. Thus, the proposed rule falls well short of the emissions reductions needed in this decade. This creates a significant potential for even more drastic disruptions of our energy industries in the near future, as we struggle to catch up with required emissions reductions.

RESPONSE 16: In regard to emission guidelines issued under CAA § 111(d) for existing sources, the U.S. EPA has the responsibility to establish the best system of emission reduction for a particular source category and the states are required to implement the emission guidelines by submitting a State Plan to the U.S. EPA for approval. The proposed rule, 45CSR44, is the first step towards the development of a State Plan. The West Virginia state code prohibits DAQ from proposing rules that are more stringent than the federal counterpart regulation, with limited exception.

COMMENT 17 [SC]: Like ACE, the proposed rule fails to account for indirect health benefits from more stringent emissions reductions. In fact, by upgrading power plants, the proposed heat rate improvements may actually increase total greenhouse gas emissions, and likewise increase the emissions of harmful fine particulates, NO_x, SO₂ and other pollutants compared to no rule at all. The Clean Air Act requires an emissions reduction, not just an emissions rate reduction.

RESPONSE 17: The proposed rule 45CSR44 adopts the federal emission guidelines of the ACE rule. The heat rate improvements identified as BSER target achieving lower CO₂ emission rates at the designated facilities. The coal-fired power plants in the West Virginia fleet are required to comply with multiple federal regulations, state rules, and air quality permit requirements that include emissions limitations for all regulated pollutants, including fine particulate matter (PM_{2.5}) nitrogen oxides (NO_x), and sulfur dioxide (SO₂) mentioned in the comment.

Proposed rule 45CSR44, requires the standard of performance to be an emission performance rate relating mass of CO₂ emitted per unit of energy (e.g. pounds of CO₂ emitted per MWh) as required under the ACE rule¹¹. Further, West Virginia Code prohibits DAQ to promulgate rules that are any more stringent than any federal rule or program, except under limited situations¹².

COMMENT 18 [SC]: The proposed rule fails to define the minimum emissions reduction levels that must be achieved. The proposed rule ignores co-firing with less-emitting fuels, carbon capture and sequestration technologies, or reductions in use of higher-emitting facilities; indeed, the rule explicitly prohibits emissions averaging or co-firing as emissions reduction approaches. By focusing on reducing the emissions rate, rather than total emissions reductions, the rule omits consideration of approaches that might reduce emissions much more cost-effectively than can be achieved with ACE, and allows scenarios that may actually increase emissions.

RESPONSE 18: The standards of performance will be established in the permit issued pursuant to 45CSR44. The proposed rule allows the owner or operator to decide how to comply with the standard of performance established in the permit, with a few exceptions that are not allowed under the ACE Rule because the measures do not meet the criteria for compliance measures under ACE - namely, they must be capable of being applied to and at the source and they must be measurable at the source such that they can be monitored, reported, and verified at a unit.¹³ The owner or

¹¹ 40 C.F.R. § 60.5755a(a)(1).

¹² W. Va. Code § 22-5-4(a)(4).

¹³ 84 Fed. Reg. 32555 (July 8, 2019).

operator of an affected EGU may choose to comply with the standard of performance using either BSER or non-BSER technologies.

West Virginia law does not allow the DAQ to specify a particular method of compliance except as specifically required by the federal CAA¹⁴.

In the preamble of the federal ACE rule, the U.S. “EPA identified several systems of GHG emission reduction that may be applied at or to designated facilities but did not propose that they should be part of the BSER”¹⁵. The U.S. EPA discussed its rationale for not including natural gas repowering, natural gas co-firing and refueling, biomass co-firing, and carbon capture and storage (CCS).¹⁶

The U.S. EPA excluded averaging and trading and bio-mass cofiring as compliance measures stating these measures do not meet the criteria for compliance measures, as further explained below:

Those criteria, which are designed to assure that compliance measures actually reduce the source’s emission rate, are two-fold: (1) The compliance measures must be capable of being applied to and at the source, and (2) they must be measurable at the source using data, emissions monitoring equipment or other methods to demonstrate compliance, such that they can be easily monitored, reported, and verified at a unit¹⁷.

Proposed rule 45CSR44 is consistent with the federal emission guidelines that are being adopted.

COMMENT 19 [SC]: The proposed rule, like ACE, wrongly deregulates gas and oil-fired power plants. This is particularly egregious given that gas has replaced coal as the largest source of electric power generation in the US.

RESPONSE 19: The proposed rule, 45CSR44, is a new rule to regulate greenhouse gas in the form of carbon dioxide emissions from existing coal-fired power plants. As it is a new rule and not a revision to an existing rule, there is no proposal to deregulate gas and oil-fired power plants in West Virginia.

[T]he EPA did not identify a BSER for IGCC units, oil- or natural gas-fired utility boilers, or fossil fuel-fired stationary combustion turbines and, thus, such units are not designated facilities for purposes of this action. In the ACE proposal (and previously in the ANPRM), the EPA solicited information on the cost and performance of technologies that may be considered as the BSER for fossil fuel-fired stationary combustion turbines and other fossil-fuel fired EGUs. The EPA

¹⁴ W. Va. Code § 22-5-4(a)(4).

¹⁵ 84 Fed. Reg. 32543 (July 8, 2019).

¹⁶ *Id.* at 32543 - 32547.

¹⁷ *Id.* at 32555.

currently does not have adequate information to determine a BSER for these EGUs and, if appropriate, the EPA will address GHG emissions from these EGUs in a future rulemaking¹⁸.

If the U.S. EPA addresses GHG emissions from these EGUs in a future rulemaking, the DAQ may propose to revise 45CSR44 accordingly.

The standards of performance for greenhouse gas emissions for new, modified, or reconstructed steam generating units, integrated gasification combined cycle (IGCC), or stationary combustion turbines are regulated under 40 CFR Part 60, Subpart TTTT and adopted by reference under 45CSR16.

COMMENT 20 [SC]: The rule (Section 1.1.a) omits major sources of greenhouse gases by focusing solely on coal-fired electric utility generating units. Other major sources need to be included, including gas-fired electric generating facilities, compressor stations, and other fossil-fuel fired industrial boilers. This is implicit in defining "fossil fuel" (section 2.23) and "natural gas" (Section 2.31), among others.

RESPONSE 20: If the U.S. EPA amends 40 C.F.R. Part 60, Subpart UUUUa to expand the scope to include gas-fired EGUs, compressor stations, and other fossil-fuel fired industrial boilers, the DAQ may propose to revise to 45CSR44 to adopt the federal counterpart regulation.

COMMENT 21 [SC]: The rule arbitrarily limits the permit requirements, performance standards, monitoring, etc. (Section 1.1.b, 1.1.c, etc.) for the "Best System of Emissions Reductions" to heat rate improvements, neglecting a wide range of alternative technologies that would reduce greenhouse gas emissions in West Virginia. It neglects a wide range of other technologies including carbon capture sequestration, fuel switching, or use of renewables for energy efficiency.

RESPONSE 21: The stated purpose of the proposed rule is to implement the federal emission guidelines established by the U.S. EPA at 40 CFR Part 60, Subpart UUUUa, and provide the applicability and permitting requirements necessary to establish standards of performance to regulate greenhouse gas emissions in the form of carbon dioxide from existing coal-fired EGUs. The title of 40 CFR Part 60, Subpart UUUUa, *Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units* will be added to section 1.1.c for clarification in the Agency Approved version of 45CSR44.

As stated in the standard of performance definition below from section 111(d) of the federal CAA, the U.S. EPA Administrator has the authority to define the BSER. West Virginia is required under this same section of the CAA to submit a State Plan to the U.S. EPA which establishes standards of performance for any existing source and provides for the implementation and enforcement of such standards of performance. Proposed rule 45CSR44 was developed for the purpose of implementing and codifying the previously mentioned federal regulations.

¹⁸ *Id.* at 32533.

The term “standard of performance” means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated¹⁹.

As stated elsewhere in this document, the DAQ does not have the authority under West Virginia law to be more stringent than the federal counterpart regulation, nor does it have the authority to specify a particular type of compliance, unless required to do so under the CAA. Additionally, and as described in more detail in the response to comment 18 above, there is nothing in proposed rule 45CSR44 that precludes a source from complying with their standard of performance with a non-BSER technology. The ACE rule requirements do not regulate renewable energy.

COMMENT 22 [SC]: The rule limits the definition of “greenhouse gas” (section 2.24) to only carbon dioxide, and omits methane, nitrous oxide, ozone, and other relevant greenhouse gases. It is scientifically indefensible to omit methane, nitrous oxide, ozone and other greenhouse gases and they need to be included as regulated greenhouse gases. The rule will not achieve the reductions in greenhouse gases needed to protect human health and the environment. The most relevant definitions are readily available in the literature and are normally expressed as carbon dioxide equivalents (CO₂e). The Federal Register definitions section does not define “greenhouse gases” as only carbon dioxide, thus this provision appears to make West Virginia’s rule significantly weaker than even the very weak federal ACE rule.

RESPONSE 22: The “greenhouse gas” definition in 2.24 of the proposed rule was removed because it is not defined in 40 CFR Part 60, Subpart UUUUa definitions. Subsequent definitions were renumbered. The proposed rule regulates greenhouse gas emissions, in the form of carbon dioxide from existing coal fired EGUs. In the final federal counterpart rule, the U.S. EPA explains this decision as follows:

The air pollutant regulated in this final action is GHGs. However, the standards in this rule are expressed in the form of limits solely on emissions of CO₂, and not the other constituent gases of the air pollutant GHGs. The EPA is not establishing a limit on aggregate GHGs or separate emission limits for other GHGs (such as methane (CH₄) or nitrous oxide (N₂O)) as other GHGs represent significantly less than one percent of total estimated GHG emissions (as CO₂e equivalent) from fossil fuel-fired electric power generating units. Notwithstanding the form of the standard, consistent with other EPA regulations addressing GHGs, the air pollutant regulated in this rule is GHGs²⁰.

¹⁹ 42 U.S.C. 7411(a)(1).

²⁰ 84 Fed. Reg. 32534 (July 8, 2019).

COMMENT 23 [SC]: The definition of "heat rate" (Section 2.25) is excessively wordy. The last two sentences can be omitted, as they do not add to the definition. Similar editing to reduce wordiness can be achieved throughout the rule.

RESPONSE 23: The definition of "heat rate" in section 2.25 was revised to remove the last sentence. The definition now reads:

"Heat rate" is the amount of energy or fuel heat input (typically measured in British thermal units, Btu) required to generate a unit of electricity (typically measured in kilowatt-hours, kWh). The lower an EGU's heat rate, the more efficiently it converts heat input to electrical output. ~~An EGU with a lower heat rate consumes less fuel per kWh of electricity generated and, as a result, emits lower amounts of CO₂ per kWh generated.~~

The rule was reviewed to reduce wordiness. The last sentence of "designated pollutant" was removed following the review. It now reads:

"Designated pollutant" means any air pollutant, the emissions of which are subject to a standard of performance for new stationary sources, but for which air quality criteria have not been issued and that is not included on a list published under section 108(a) or section 112(b)(1)(A) of the CAA. ~~For the purposes of this rule, CO₂ is the designated pollutant.~~

Section 5.4 was streamlined as follows:

The Secretary may consider remaining useful life or other source-specific factors when determining the standard of the performance for the affected steam generating unit based on the factors identified in subsection 4.5. If the Secretary considers remaining useful life, the shutdown date ~~for the affected steam generating unit shall be a required permit condition~~ shall be specified in the permit.

COMMENT 24 [SC]: The definition of "mechanical output" (section 2.29) can be simplified by changing "745.7" to "0.0007457" and deleting "then dividing by 1,000,000".

RESPONSE 24: For consistency with 40 CFR Part 60, Subpart TTTT, *Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units*, this definition is copied verbatim.

COMMENT 25 [SC]: It is not clear why the rule (or the ACE rule on which it is based) only applies to facilities "that commenced construction on or before Jan. 8, 2014" (Section 3.1, 3.3.a., etc.). The rule should be amended to include new facilities as well.

RESPONSE 25: Emission guidelines issued under CAA § 111(d) are for existing sources; however, there is a requirement that a corresponding new source performance standard (NSPS) exist for new sources. The corresponding NSPS is 40 CFR Part 60, Subpart TTTT, *Standards of*

Performance for Greenhouse Gas Emissions for Electric Generating Units, was published October 23, 2015 and applies to affected sources that commenced construction after January 8, 2014 or commenced modification or reconstruction after June 18, 2014. The DAQ incorporated NSPS, Subpart TTTT by reference under 45CSR16 during the 2017 legislative session.

Under section 111 of the CAA, the term “existing source” means any stationary source other than a new source and the term new source is defined as:

The term “new source” means any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source²¹.

COMMENT 26 [SC]: It is not clear why municipal waste or commercial waste incinerators are not included (Section 3.1.g and 3.1.h). The rule should be revised to include these facilities, or a counterpart rule should be established.

RESPONSE 26: The exclusion of any EGU that is a municipal waste incinerator subject to 40 CFR Part 60, Subpart Eb in section 3.1.g is consistent with the federal counterpart regulation. This federal regulation, 40 CFR Part 60, Subpart Eb, is a new source performance standard that is incorporated by reference under 45CSR18. The exclusion of any EGU that is commercial or industrial solid waste incineration unit subject to 40 CFR Part 60, Subpart CCCC in section 3.1.g is consistent with the federal counterpart regulation. This federal regulation, 40 CFR Part 60, Subpart CCCC, is a new source performance standard that is incorporated by reference under 45CSR18. The federal ACE counterpart emission guidelines are limited in scope to existing facilities that are regulated under section 111(d) of the CAA.

COMMENT 27 [SC]: Typographical. The last line of Section 4.2 refers to "sections 4". Either another rule section should be cited, or the word should be the singular "section".

RESPONSE 27: Section 4.2 was revised to the singular “section”.

COMMENT 28 [SC]: Section 4.4 directs the owner or operator of an affected unit to propose a performance standard but offers no specific criteria that the performance standard must meet. As such, this offers the owners or operators of regulated units the opportunity to essentially offer a voluntary standard. It is essentially a request for the owners to "do what you think is best", rather than an explicit set of standards that must be met. This approach simply does not acknowledge the seriousness of the climate crisis, or offer an emissions control strategy adequate to address the climate crisis. West Virginia DEP must set the regulatory standards and the criteria for performance that regulated units must meet. They must set an allowable emissions rate intended to meet the kinds of reductions in greenhouse gas emissions needed to address the climate crisis.

²¹ 42. U.S.C. 7411(a)(2) and (6).

RESPONSE 28: Although section 4.4 requires the owner or operator to propose a standard of performance, the DAQ is required to establish the standard of performance in a permit that reflects the degree of emission limitation achievable through application of heat rate improvements used to calculate the standard after the BSER heat rate improvements were considered²². The DAQ is also required to establish monitoring, recordkeeping, reporting, and a compliance period.

COMMENT 29 [SC]: Language in section 4.5 that offers consideration of site-specific factors such as cost, age of the facility, etc. provides additional invitation to propose the weakest possible standard. This also creates an unfair advantage to allow the oldest and dirtiest facilities to continue operating, and presents a competitive disadvantage to those facilities that do adopt more stringent standards. The rule thus creates incentives for a "race to the bottom" that undermines any effort to reduce emissions.

RESPONSE 29: The language in section 4.5 of proposed rule 45CSR44 comes from the corresponding federal language in 40 CFR §§ 60.5755a(a)(2)(i) and 60.24a(e). The CAA requires the U.S. EPA to consider the remaining useful life of the source category among other factors when developing standards of performance for existing sources²³. Section 5.4 of proposed rule 45CSR44 states that if remaining useful life is considered when developing a standard of performance in the air quality permit, the shutdown date of the affected EGU is required to be specified in the air quality permit.

There is an economic incentive for existing coal fired EGUs in West Virginia to be as efficient as possible. Inefficiencies lead to a greater cost per kilowatt hour and makes them less competitive in the electricity market.

COMMENT 30 [SC]: Section 4.11 allows the applicant to propose a compliance schedule, and does not impose any firm deadlines, other than the provision in section 5.6.c that the secretary adopt "increments of progress". This is a prescription for delay, undermining any effort to actually reduce greenhouse gas emissions. The rule must propose a firm deadline for compliance, and be as soon as practicable, not later than the end of 2022. If warranted, a variance process can be considered, but such a process must have enforceable incentives to achieve significantly enhanced reductions in greenhouse gas emission in exchange for delays in implementation.

RESPONSE 30: Each air quality permit issued pursuant to 45CSR44 upon finalization is required to specify a compliance date for the affected facility (section 5.6.b). Each standard of performance will be developed based on a unique heat rate improvement analysis of the EGU. As such, facilities may rely upon different technologies to comply with the standard that is established in the permit and there will be differences in the time to implement the different strategies. Therefore, the permit applicant is required to propose a compliance schedule in the permit application.

In section 5.6.c, the July 8, 2024 date is based on 40 CFR § 60.24a(d) that requires any compliance schedule extending more than 24 months from the date required for submittal of a State Plan must

²² Proposed § 45-44-5.3.

²³ U.S.C. 7411(d)(2).

include legally enforceable increments of progress to permit close and effective supervision of progress toward final compliance. The State Plan is due to the U.S. EPA on July 8, 2022.²⁴ West Virginia law prohibits any rule promulgated by the DAQ from being any more stringent than the federal counterpart regulation, except under limited circumstances²⁵.

COMMENT 31 [SC]: Section 5.4 allows the secretary to consider the remaining useful life of a unit but does not indicate what “remaining useful life” is. This needs to be set at a relatively short period to justify waiver of emissions reduction requirements. This section should be amended to require that no remaining useful life greater than five years would be considered. We support making a shutdown date a permit requirement for any such exemption.

RESPONSE 31: The U.S. EPA ACE rule does not quantify remaining useful life. Instead the remaining useful life of an EGU is characterized as a retirement date in the near future²⁶. The DAQ agrees that remaining useful life of a unit should be set at a relatively short period and quantified for it to be considered in establishing the standard of performance and has amended section 5.4 to reflect that remaining useful life should not exceed five years.

The ACE rule requires “[T]he state must establish a standard of performance that specifies the designated facility will retire by a future date certain (i.e., the date by which the EGU will no longer supply electricity to the grid).²⁷”

Section 5.4 has been revised as follows (includes the streamline revision made under comment 23):

The Secretary may consider remaining useful life or other source-specific factors when determining the standard of the performance for the affected steam generating unit based on the factors identified in subsection 4.5. If the Secretary considers remaining useful life, the time frame should not exceed five years, and the shutdown date shall be specified in the permit.

Commenter 5 [WVRC] - Angie Rosser, Executive Director of West Virginia Rivers Coalition

COMMENT 32 [WVRC]: In looking at this rule it's really unclear, if not contrary, to what the science guides us on this, is that we need to take action to reduce greenhouse gases in order to mitigate the climate disruption ahead of us and the costs that come with it. And my question is, in what way does this proposed rule and state plan match the goals of the scientists and panels such as the intergovernmental panel on climate change recommendations to reduce greenhouse gas emissions?

²⁴ 40 C.F.R. § 60.5745a.

²⁵ W. Va. Code § 22-5-4(a)(4).

²⁶ 84 Fed. Reg. 32554 (July 8, 2019).

²⁷ *Id.* at 32558.

RESPONSE 32: Proposed rule 45CSR44 is intended to implement the federal *Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units*²⁸ in accordance with the implementation requirements of 40 CFR Part 60, Subpart Ba, *Adoption and Submittal of State Plans for Designated Facilities*. The state rule, when finalized, will require affected EGUs to submit permit applications to the DAQ meeting the federal emission guidelines that are adopted in the state rule. The DAQ will issue permits to each of the affected facilities with the standards of performance and all compliance mechanisms including monitoring, recordkeeping, and reporting requirements. The State Plan will be submitted to the U.S. EPA for approval and will include the finalized 45CSR44, the standards of performance for each of the affected EGUs, and demonstrations that West Virginia has met its obligations required by the above-mentioned federal regulations.

The U.S. EPA published the *Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act* that was signed December 7, 2009 and became effective January 14, 2010²⁹. “These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing greenhouse gas emissions standards for vehicles³⁰.” The Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change, was one of the many references cited in the technical support document for the findings³¹.

COMMENT 33 [WVRC]: This rule reads, speaks of extreme subjectivity. There's a lot of judgement calls and discretion that the Secretary has afforded on this and it kind of flies in the face of what I've heard from industry groups in terms of wanting consistency and certainty when it comes to regulation. I'm seeing nothing that really leans in that direction. I'm seeing case-by-case evaluations about what appropriate standards are. As has been mentioned, the operator proposes what the standards are, and they have out if they can make it an argument for unreasonable costs.

RESPONSE 33: The proposed rule establishes the structure for a case-by-case analysis required to develop the standard of performance for each affected EGU in the West Virginia fleet based on the heat rate improvement analysis specific to each EGU. Because of the case-by-case analysis required by the federal emission guidelines, the DAQ decided the best approach was to establish the standards of performance in an air quality permit for the facility. By providing the minimum permit application and permit issuance requirements in the state rule, it provides consistency for the regulated community.

In explaining the heat rate improvement as BSR for existing coal fired EGUs in the corresponding federal regulation, the U.S. EPA states³²:

²⁸ 40 C.F.R. Part 60, Subpart UUUUa.

²⁹ 74 Fed. Reg. 66496 (December 15, 2009).

³⁰ <https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean>.

³¹ Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. December 7, 2009. Climate Change Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, DC.

³² 84 Fed. Reg. 32535 (July 8, 2019).

[T]he U.S. fleet of existing coal-fired EGUs is a diverse group of units with unique individual characteristics that are spread across the country¹⁶⁷. As a result, heat rates of existing coal-fired EGUs in the U.S. vary substantially. Thus, even though the variation in heat rates among EGUs with similar design characteristics, as well as year-to-year variation in heat rate at individual EGUs, indicate that there is potential for HRI that can improve CO2 emission performance across the existing coal-fired EGU fleet, this potential may vary considerably at the unit level—including because particular units may not be able to employ certain HRI measures, or may have already done so.

¹⁶⁷ For example, the current fleet of existing fossil fuel-fired EGUs is quite diverse in terms of size, age, fuel type, operation (e.g., baseload, cycling), boiler type, etc. Moreover, geography and elevation, unit size, coal type, pollution controls, cooling system, firing method, and utilization rate are just a few of the parameters that can impact the overall efficiency and performance of individual units.

The U.S. EPA indicates that standards of performance may be issued as a permit³³ prior to the State Plan being submitted to the EPA for approval.

In regard to taking cost into consideration, the CAA includes costs in the definition of standard of performance that is cited elsewhere in this response to comment document.

COMMENT 34 [WVRC]: We would share the concerns that have been voiced in terms of compliance schedules with no end date in sight. I have seen compliance schedules -- they can be justified in certain circumstances but not extended for decades which I have seen happen.

RESPONSE 34: Please refer to the response to comment 30 above.

COMMENT 35 [WVRC]: In terms of cost, it was interesting to read the narrative in the rule about the economic input, impact of the rule on the state or residents. I would like to hear why the DEP did not address or ignored health costs or if this would result in any health costs or other costs to residents or the state in terms of if we do not address these needed reductions. We know we will be facing increased weather, extreme weather events, more flooding. Just in the past four years, flooding has cost the state and its residents nearly \$1 billion.

RESPONSE 35: The fiscal note is based on implementing the federal emission guidelines established at 40 C.F.R. part 60, subpart UUUUa, *Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units*, commonly referred to as the ACE rule, in accordance with 40 C.F.R. part 60, subpart Ba under 45CSR44.

³³ *Id.* at 32553.

Although the U.S. EPA addressed compliance costs, domestic climate benefits, ancillary health co-benefits, and net benefits in the federal rulemaking³⁴, this information was not broken down to a state level. Thus it was not provided in the fiscal note because the assumptions made were at the federal level. The DAQ is not permitted by West Virginia law to consider such factors in the fiscal note for this rule.

Cost avoidance of not implementing a rule to control GHG emissions in West Virginia is beyond the scope of the fiscal note.

COMMENT 36 [WVRC]: In that same section around costs, there's an assertion, a statement that says the West Virginia coal-fired power plant fleet is one of the most efficient in the country and I would like to know more about the basis of that assertion and what data and what matrixes were used to come to that conclusion.

RESPONSE 36: The data was pulled from a query from the U.S. EPA's Air Markets Program Data website, commonly referred to as CAMD.³⁵ Carbon dioxide emissions data and gross load data was downloaded for all EGUs that use coal as the primary fuel and were in operation the last five years (2015 - 2019) for all states meeting this criteria. On a West Virginia fleet basis, the CO₂ emission rate is 1,899 lbs/MW-h (gross). The West Virginia fleet is second only to the Delaware fleet (1,840 lbs/MW-h (gross) that has only one coal fired EGU in operation and performs better than the national average of 2,426 lbs/MW-h (gross).

³⁴ 84 Fed. Reg. 32571 (July 8, 2019) and Regulatory Impact Analysis for the Repeal of the Clean Power Plan, and the Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units.

³⁵ ampd.epa.gov/ampd

APPALACHIAN AND ATLANTIC DEFENSE COUNCIL

179 Church Street
Chillicothe, Ohio 45601

July 28, 2020

RE: Proposed Rule 45 CSR 44

Control of Greenhouse Gas Emissions from Existing Coal-Fired Electric Utility Generating Units

Gutless Folly. A nothing burger. By design, of course. Why even add pretense to the farce by calling the proposed 45 CSR 44 Control of Greenhouse Gas Emissions, since clearly it does not propose to control anything?

'Heat rate improvements which target achieving lower carbon dioxide emission rates at designated facilities.' Neural network and intelligent sootblowers, boiler feed pumps, air heater and duct leakage control, variable frequency drives, blade path upgrades, economizer redesign or replacement and improved operating and maintenance practices. These are process operating improvements. If West Virginia's fleet of coal-fired power plants can achieve CO2 emission rate reductions by these trivial maintenance and operational improvements then the end must be near for them already.

So there is the silver lining. While West Virginia is drug against its will into the 21st century, new markets and technology are doing what the gutless coal-buoyed administrations of Gaston Caperton, Cecil Underwood, Bob Wise, Joe Manchin, Earl Ray and the current corrupt slob would not, i.e. make coal pay for its costs. Good luck reclaiming those open strip jobs and mountaintop removal projects when there's no money to pay anyone to work them. Good luck reversing global impacts of decades of burning coal knowing that we were altering the chemistry of the atmosphere. How's your President and his 'leadership' doing in bringing back coal?

There never was any war on coal but there should have been. And there should be now. Even as the impacts of rising atmospheric CO2 levels and global climate changes are manifesting themselves in real time for all of us to see, here is West Virginia implementing regulations to protect an industry dying of its own weight. For decades, West Virginia could have led, followed or got the hell out of the way, but it didn't. And now it is getting run over. West Virginia still retains a wealthy legacy of natural beauty, resources and proud resilient people. It's time to start working toward a future that protects them all and not the interests profiting from continued coal-fired electric generation.

This proposed regulation is medicine to a dying patient. It is time to move on to renewable sustainable solutions and cease the legislative and regulatory coddling of an industry that has externalize the costs of its global impacts. When you've dug yourself a hole, maybe you ought to stop digging, dumbass.

Sincerely,



David White

From: Aileen <acurfman@gmail.com>
Sent: Tuesday, July 28, 2020 12:59 PM
To: DEP Comments
Subject: [External] DAQ 2021 Rule Comments—Verbal Testimony on 45CSR44 (Control of Greenhouse Gas Emissions from Existing Coal-Fired Electric Utility Generating Units)

CAUTION: External email. Do not click links or open attachments unless you verify sender.

Thank you for providing an opportunity for public comment.

The intent of 45CSR44 is to revise the DAQ regulations so that they mirror EPA's Affordable Clean Energy rule. This rule replaces the Clean Power Plan, which the industry challenged, saying that its requirements were too expensive to implement. Economic factors are not supposed to be considered when standards are established, but when the added burden of health care is considered along with other costs, weaker standards do not even make economic sense. In 2017 our rate of chronic lower respiratory disease was the fourth highest in the nation. We should be looking to reduce that cost.

Additionally, the Affordable Clean Energy rule fails to address the increasingly urgent costs of ignoring climate change, which is already contributing to floods, wildfires, and severe weather events. Within our grandchildren's lifetime, climate change, if unabated, will create an Earth where human life will be at best difficult to sustain.

The ACE rule does not support the EPA's responsibility to mitigate the effect of greenhouse gas emissions, and it does not fully comply with the Clean Air Act, which specifies that performance standards for existing sources of air pollution must reflect the emissions reductions that can be achieved through application of the "best system of emission reduction" for the pollutant and the source. The BSER is based on three components: (1) heat-rate improvements at coal-fired power plants, (2) increased utilization of natural gas combined cycle units, and (3) increased use of renewable energy. However, the ACE rule addresses only the first of these three components. The reduction in emissions is small—only about 1/1000th of national emissions by the year 2050.

The ACE rule is limited to CO2 emissions. Ozone, methane, and other significant greenhouse gases are ignored. Emissions of SO2 and nitrogen oxide are estimated to increase under the Affordable Clean Energy rule, which will encourage additional use of coal due to its reliance on heat-rate improvements.

Under the ACE rule, performance standards would be set by the owner or operator of a source facility. The rule does not provide criteria that the facility must meet. The operator sets the facility's schedule for attaining compliance (with the operator's own standards). There is no deadline. No guidelines or benchmarks are provided to assist the operator's evaluation of progress toward attainment.

The proposed DAQ rule, 45CSR44, mirrors the ACE rule and has the same unacceptable shortcomings. Adoption of this rule will be ineffective in slowing the disastrous effects of climate change. In West Virginia, short term effects will also be undesirable and costly. People who suffer from diseases such as asthma and COPD are depending on the DAQ to ensure air quality that is not injurious to their health. The DAQ must reject the weak standards of the ACE rule and join the many states that are maintaining standards that protect the health and safety of the people, both in the short term and for generations to come.

Aileen Curfman
1067 Comstock Dr.
Shepherdstown, WV 25443



Scott A. Weaver, Director
Air Quality Services
1 Riverside Plaza
Columbus, OH 43218
614/716-3771
sawaver@aep.com

July 28, 2020

Sandra Adkins
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
depcomments@wv.gov

Re: Control of Greenhouse Gas Emissions from Existing Coal-Fired
Electric Generating Units
Proposed Rule 45 CSR 44

Dear Ms. Adkins:

These comments are submitted on behalf of the operating subsidiaries of American Electric Power Company, Inc. (AEP) that are the owners and operators of certain existing coal-fired electric generating units located in the State of West Virginia (Appalachian Power Company, Wheeling Power Company, and Kentucky Power Company, collectively referred to herein as “AEP”). These units supply electricity to customers located in Virginia, West Virginia, and Kentucky, and are a vital part of the economy of this region. The proposed rule would impose additional permitting requirements and emission limitations on these units, in accordance with the emission guidelines promulgated by the United States Environmental Protection Agency (USEPA) in 40 CFR Part 60, Subpart UUUUa, and allow the West Virginia Department of Environmental Protection (WVDEP) to establish unit-specific performance standards for each affected source. AEP appreciates the opportunity to submit these comments on the proposed rule.

The technical basis of USEPA’s emission guidelines is a set of potential heat rate improvement opportunities that may improve the efficiency of specific types of equipment that are typically used in coal-fired electric generating unit (EGU) designs. Not all of the EGUs in West Virginia share the same design, and some of the units do not have the type of equipment included in USEPA’s “best system of emission reduction” (BSER) or have already taken advantage of these or other opportunities to improve overall unit efficiency. Therefore, WVDEP, as the permitting authority in the State of West Virginia, is charged with exercising its authority to identify applicable technologies for individual units, using the ranges provided in USEPA’s guidelines and

other information about that specific source to estimate the heat rate improvements that might be achieved through application of those technologies at the unit, and establishing a standard of performance that the unit must meet. WVDEP's determination does not require that any specific technology be implemented by the owners and operators of the units, it only establishes the standard of performance for the unit based on the applicable BSER measures.

The proposed rule reflects WVDEP's choice to implement these requirements through a permitting exercise, and establishes application requirements for the effected sources, a timeline for permitting, the content of permits, monitoring, recordkeeping and reporting requirements, and a means of reconciling inconsistencies between the proposed rule and any other applicable rule. There is also a provision allowing for termination of a permit if USEPA's rule is invalidated or withdrawn.

USEPA's guidelines include certain information requirements that were held over from an earlier standard that has since been repealed, which are included in 45 CSR §44-4.9.a. Both rules require submission of such information only if it is applicable and necessary to establish a standard of performance. In many instances, this information is not necessary for that purpose, and due to the projected nature of the information, it is typically considered highly confidential by unit operators.

Other elements of the analyses required to be submitted by owners and operators are also considered highly confidential, and would provide competitors, including independent power producers who participate in the capacity and energy markets in multiple regional transmission organizations. Our understanding is that the agency intends to make available all of the protections offered by its general provisions governing confidential business information in 45 CSR 31 to assure that such information, if required to be submitted, can be designated as confidential information and protected from public dissemination or disclosure.

In addition, AEP is concerned that the prohibition in 45 CSR §44-5.1 contains no effective date. This provision prevents the operation of an affected unit if no permit is obtained, but should not be effective prior to USEPA's approval of the state's plan. AEP suggests that this provision be re-written with an introductory clause to that effect.

AEP appreciates the Division's careful consideration of these comments. If any further information is necessary, please contact me at the phone number or email address listed above.

Letter to Ms. Sandra Adkins
July 28, 2020
Page 3

Sincerely,

A handwritten signature in black ink that reads "Scott A Weaver". The signature is written in a cursive, slightly slanted style.

Scott A. Weaver, Director
Air Quality Services
American Electric Power Service Corporation



**SIERRA
CLUB**

Sierra Club

West Virginia Chapter

P.O. Box 4142
Morgantown, WV 26504

July 27, 2019

Sandra Adkins
WVDEP – Division of Air Quality
601 57th St., SE
Charleston, WV 25304
Via e-mail to: dep.comments@wv.gov

Re: Comments on Air Quality draft rules, 45-CSR-23, MSW Landfills; 45-CSR-33, Acid Rain Program; and 45-CSR-44, Control of Greenhouse Gas Emissions From Existing Coal-Fired Electric Utility Generating Units

Dear Ms. Adkins:

Please accept the following comments on behalf of the WV Chapter of Sierra Club, and our approximately 2600 members.

45-CSR-23. MSW Landfills;

Paragraph 7.6.a.4. appears to have a typo. The deletion creates an incomplete sentence and makes the wording unclear.

45-CSR-33. Acid Rain Program.

We oppose the revision to 45-CSR-33 which proposes to implement an EPA rule addressing the effect of Covid-19 on an operator's testing program. This proposed rule allows the facility to continue to report their actual monitored data if the data would otherwise be considered valid and the delay is due to Covid-19 precautions. The EPA rule amends 40-CFR-Part 75 regarding Continuous Emissions Monitoring Systems, and the Part 75 amendment expires 180 days after the effective date (April 22, 2020).

Since the amendment to 45-CSR-33 is being proposed for 2021, the parallel EPA rule regarding the Part 75 COVID-19 waiver for monitoring requirements is likely to no longer be in effect when the DAQ rule becomes effective. Yet the Statement of Circumstances for the proposed rule emphasizes this as a justification for the rule change.

The Part 75 rule for monitoring is intended to assure accurate monitoring of emissions, especially those involved in the Acid Rain trading program. If operators do not test the accuracy of their emissions monitoring, the original Part 75 rule required them to assume higher emissions rates, and to acquire emissions trading credits for those higher emissions rates. This created a strong incentive to assure accurate monitoring. Allowing operators to delay testing to verify the accuracy of their emissions monitoring creates a significant incentive to allow higher emissions, and to allow their monitoring program to under-report those emissions.

Given that air pollution emissions exacerbate susceptibility to the coronavirus that causes COVID-19, and that many West Virginians that have already died from that disease, the West Virginia Sierra Club advocates for a rule that adopts the CDC's recommendations for critical infrastructure workers in the manufacturing sector. These recommendations include health screening for employees prior to entering the workplace, regular monitoring of employees for symptoms, wearing masks or cloth face coverings, social distancing, and regular sanitizing of the workspace. These recommendations are based on current knowledge of how diseases spread. They are similar to the "universal precautions" that medical personnel have used for decades. If testing personnel and plant employees are required to follow the CDC recommendations, they will be able to carry out their duties safely, just as doctors and nurses do. Employees will remain safe and testing deadlines will not be missed due to Covid-19.

Importantly, operators will not have a significant financial incentive to allow increased emissions, thereby protecting all West Virginians.

And coincidentally, given that the EPA rule change is set to expire before the proposed WV rule takes effect, operators will not be faced with uncertainty over which monitoring rules apply.

45-CSR-44. Control of Greenhouse Gas Emissions From Existing Coal-Fired Electric Utility Generating Units

This proposed rule falls short in several important ways and should be amended to fully comply with the Clean Air Act. In particular, the proposed rule, like the EPA Affordable Clean Energy rule (ACE) on which it is based, fails to adequately address climate change, the very reason for the rule's existence. The emissions reductions that would be achieved are negligible, and fail to protect the health of West Virginians, and the health of our environment.

It is becoming increasingly evident that the climate crisis is much more serious than was believed even a few years ago, and requires rapid reductions in greenhouse gas emissions. Emissions of greenhouse gases are cumulative, and delays today mean we must take much more draconian steps in the near future. Thus, the proposed rule falls well short of the emissions reductions needed in this decade. This creates a significant potential for even more drastic disruptions of our energy industries in the near future, as we struggle to catch up with required emissions reductions.

Like the ACE, the proposed rule fails to account for indirect health benefits from more stringent emissions reductions. In fact, by upgrading power plants, the proposed heat rate improvements may actually increase total greenhouse gas emissions, and likewise increase the emissions of harmful fine particulates, NO_x, SO₂ and other pollutants compared to no rule at all. The Clean Air Act requires an emissions reduction, not just an emissions rate reduction.

Importantly, the rule fails to define the minimum emissions reduction levels that must be achieved. The proposed rule ignores co-firing with less-emitting fuels, carbon capture and sequestration technologies, or reductions in use of higher-emitting facilities; indeed, the rule explicitly prohibits emissions averaging or co-firing as emissions reduction approaches. By focusing on reducing the emissions rate, rather than total emissions reductions, the rule omits consideration of approaches that might reduce emissions much more cost-effectively than can be achieved with ACE, and allows scenarios that may actually increase emissions.

The proposed rule, like ACE, wrongly deregulates gas and oil-fired power plants. This is particularly egregious given that gas has replaced coal as the largest source of electric power generation in the US.

Specific issues with the proposed rule include the following:

1) The rule (Section 1.1.a) arbitrarily omits major sources of greenhouse gases by focusing solely on coal-fired electric utility generating units. Other major sources need to be included, including gas-fired electric generating facilities, compressor stations, and other fossil-fuel fired industrial boilers. This is implicit in defining “fossil fuel” (section 2.23) and “natural gas” (Section 2.31), among others.

2) The rule arbitrarily limits the permit requirements, performance standards, monitoring, etc. (Section 1.1.b, 1.1.c, etc.) for the “Best System of Emissions Reductions” to heat rate improvements, neglecting a wide range of alternative technologies that would reduce greenhouse gas emissions in West Virginia.

3) The rule limits the definition of “greenhouse gas” (section 2.24) to carbon dioxide, and omits methane, nitrous oxide, ozone, and other relevant greenhouse gases. As such, this definition is scientifically indefensible, and will not achieve the reductions in greenhouse gases needed to protect human health and the environment. The most relevant definitions are readily available in the literature and are normally expressed as carbon dioxide equivalents (CO₂e). The Federal Register definitions section does not define “greenhouse gases” as only carbon dioxide, thus this provision appears to make West Virginia’s rule significantly weaker than even the very weak federal ACE rule.

4) The definition of “heat rate” (Section 2.25) is excessively wordy. The last two sentences can be omitted, as they do not add to the definition. Similar editing to reduce wordiness can be achieved throughout the rule.

5) The definition of “mechanical output” (section 2.29) can be simplified by changing “745.7” to “0.0007457” and deleting “then dividing by 1,000,000”.

6) It is not clear why the rule (or the ACE rule on which it is based) only applies to facilities “that commenced construction on or before Jan. 8, 2014” (Section 3.1, 3.3.a., etc.). The rule should be amended to include new facilities as well.

7) Likewise, it is not clear why municipal waste or commercial waste incinerators are not included (Section 3.1.g and 3.1.h). The rule should be revised to include these facilities, or a counterpart rule should be established.

8) Typographical. The last line of Section 4.2 refers to “sections 4”. Either another rule section should be cited, or the word should be the singular “section”.

9) Section 4.4 directs the owner or operator of an affected unit to propose a performance standard, but offers no specific criteria that the performance standard must meet. As such, this offers the owners or operators of regulated units the opportunity to essentially offer a voluntary standard. It is essentially a request for the owners to “do what you think is best”, rather than an explicit set of standards that must be met. This approach simply does not acknowledge the seriousness of the climate crisis, or offer an emissions control strategy adequate to address the climate crisis. WV-DEP must set the regulatory standards and the criteria for performance that regulated units must meet. Language in section 4.5 that offers consideration of site-specific factors such as cost, age of the facility, etc. provides additional invitation to propose the weakest possible standard. This also creates an unfair advantage to allow the oldest and dirtiest facilities to continue operating, and presents a competitive disadvantage to those facilities that do adopt more stringent standards. The rule thus creates incentives for a “race to the bottom” that undermines any effort to reduce emissions.

10) Section 4.11 allows the applicant to propose a compliance schedule, and does not impose any firm deadlines, other than the provision in section 5.6.c that the secretary adopt “increments of progress”. This is a prescription for delay, undermining any effort to actually reduce greenhouse gas emissions. The rule must propose a firm deadline for compliance, and be as soon

as practicable, not later than the end of 2022. If warranted, a variance process can be considered, but such a process must have enforceable incentives to achieve significantly enhanced reductions in greenhouse gas emission in exchange for delays in implementation.

11) Section 5.4 allows the secretary to consider the remaining useful life of a unit, but does not indicate what "remaining useful life" is so short as to justify waiver of emissions reduction requirements. The section should be amended to require that no remaining useful life greater than five years would be considered. We support making the shutdown date a permit requirement for this exemption.

Thank you for the opportunity to provide these comments.

Sincerely,

A handwritten signature in cursive script that reads "James Kotcon".

James Kotcon
Conservation Chair
WV Chapter of Sierra Club
jkotcon@gmail.com

45-CSR-8. Ambient Air Standards. Adopts new EPA reference method. No Comments.

45-CSR-16. New Source Standards. (CI-ICE and Wood-burners). Continues and expands the exemption for wood-burning stoves and forced-air furnaces. Oppose?

45-CSR-18. Combustion of Solid Waste. No Comments.

45-CSR-23-MSW Landfills.

Typo. 7.6.a.4. The deletion creates an incomplete sentence and makes the wording unclear.

45-CSR-33. Acid Rain Program. Aileen's comments on EPA's 180-day expiration (from April 22, 2020) means the rule change is not needed, and legislative approval would not take effect before the EPA waiver expires.

45-CSR-34. HAPS. No Comments

DEPARTMENT OF ENVIRONMENTAL PROTECTION PUBLIC HEARING

CONTROL OF GREENHOUSE GAS EMISSIONS FROM EXISTING COAL-FIRED ELECTRIC UTILITY GENERATING UNITS

07/28/2020



"Because your time matters"

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Charleston, WV 25301

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

PUBLIC HEARING TEXT - VIRTUAL HEARING

PROPOSED 2021 LEGISLATIVE RULES

July 28, 2020 - 6:00 PM

Held via Microsoft TEAMS

45CSR44 - Control of Greenhouse Gas Emissions
from Existing Coal-Fired Electric
Utility Generating Units

REALTIME REPORTERS, LLC
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1 45CSR44, Control of Greenhouse Gas Emissions
2 from Existing Coal-Fired Electric
3 Utility Generating Units

4 -- oOo --

5 MS. JENNINGS: Is the court reporter ready to
6 proceed to the next hearing?

7 COURT REPORTER: I am.

8 MS. JENNINGS: Thank you.

9 The public hearing for the proposed
10 Legislative Rule 45CSR44, Control of Greenhouse Gas
11 Emissions from Existing Coal-Fired Electric Utility
12 Generating Units, will now come to order on this 28th
13 day of July 2020, held virtually to prevent the spread
14 of COVID-19 in accordance with the Governor's Safer at
15 Home Order and the West Virginia Department of
16 Environmental Protection COVID-19 policy.

17 Comments and testimony will be accepted until
18 the close of this hearing and will be made part of the
19 rule-making record. Any question regarding revisions to
20 the rules should be included with your comments, and any
21 such question will be addressed as part of the response
22 to comments in the rule-making record.

23 The purpose of this public hearing is to
24 accept comments on proposed revisions -- excuse me, the
25 purpose of this public hearing is to accept comments on

1 the proposed Rule 45CSR44, Control of Greenhouse Gas
2 Emissions from Existing Coal-Fired Electric Utility
3 Generating Units. This is a new rule.

4 This rule will implement the federal emission
5 guidelines established at 40 CFR 60, subpart UUUUa,
6 commonly referred to as the Affordable Clean Energy or
7 ACE rule, in accordance with 40 CFR Part 60, subpart Ba.

8 The federal emission guidelines establish the
9 best systems of emission reduction, or BSER, which in
10 the judgment of the United States Environmental
11 Protection Agency, have been adequately demonstrated and
12 provide information on the degree of emission limitation
13 achievable for the designated pollutant.

14 The federal emission guidelines are heat-rate
15 improvements which target achieving lower carbon dioxide
16 emission rates at designated facilities. The federal
17 emission guidelines were developed pursuant to section
18 111(d) of the Federal Clean Air Act.

19 This rule will regulate greenhouse gas
20 emissions in the form of carbon dioxide from existing
21 coal-fired electric generating units that commenced
22 construction on or before January 8, 2014, that meet the
23 definition of a designated facility.

24 This rule will establish applicability

1 criteria, permit application requirements, permit
2 requirements, standard of performance requirements, and
3 monitoring recordkeeping and reporting requirements for
4 designated facilities for the Secretary to control
5 carbon dioxide emission rates resulting from the
6 analysis of heat-rate improvements that can be applied
7 to or at the unit.

8 Upon authorization and promulgation, 45CSR44
9 will be submitted to the United State Environmental
10 Protection Agency for approval as a component of the
11 Clean Air Act §111(d) State Plan to fulfill federal
12 obligations.

13 Stephanie, has anyone pre-registered to
14 provide comment or testimony in regard to proposed rule
15 45CSR44? If so, please unmute their line and call on
16 them now. Please ask them to state clearly their name
17 and any affiliation.

18 As a reminder, please limit testimony to one
19 witness for each organization and limit testimony to
20 five minutes for each witness.

21 MS. HAMMONDS: Thank you, Laura. Good
22 evening. Cross examination of commenters is not
23 allowed. As Laura stated, DAQ will not be responding to
24 comments tonight.

1 We have one commenter who registered,
2 Ms. Alieen Curfman. Please unmute your line and provide
3 your comments.

4 MS. CURFMAN: Hello. My name is Alieen
5 Curfman and I am commenting on my own behalf, an
6 interested private citizen. Thank you for providing an
7 opportunity to make public comment.

8 The 45CSR44 is to revise the DAQ regulation so
9 that they mirror EPA's Affordable Clean Energy rule.
10 This rule replaces the Clean Power Plan which the
11 industry challenged saying it's requirement were too
12 expensive to implement.

13 When the added burden of health care is
14 considered along with other costs, weaker standards do
15 not make economic sense. In 2017, our rate of chronic
16 lower respiratory disease was the fourth highest in the
17 nation. We should be looking to reduce that cost.

18 Additionally, the Affordable Clean Energy rule
19 fails to address the increasingly urgent costs of
20 ignoring climate change. It is already contributing to
21 floods, wildfires, and similar weather events. Within
22 our grandchildren's life time, climate change, if
23 unbated, will create an earth where human life will be,
24 at best, difficult to sustain.

1 The Affordable Clean Energy rule does not
2 support the EPA's responsibility to mitigate the effect
3 of greenhouse gas emissions and it does not fully comply
4 with the Clean Air Act which specifies that performance
5 standards for existing sources of air pollution must
6 reflect the emissions reductions that can be achieved
7 through implementation of the best system of emission
8 reduction for a pollutant and the source.

9 The BSER is based on three components; one,
10 heat-rate improvements at coal-fired power plants; two,
11 increased utilization of natural gas combined cycle
12 units; and three, increased use of renewable energy.

13 However, the ACE rule addresses only the first
14 of these three components. The reduction in omissions
15 is small, only 1/1,000th of national emissions by the
16 year 2050. The ACE rule is limited to CO2 emissions.
17 Ozone, methane and other significant greenhouse gasses
18 are ignored.

19 Emissions of sulfur dioxide and nitrogen oxide
20 are estimated to increase under the Affordable Clean
21 Energy rule which would encourage additional use of coal
22 due to its reliance of heat-rate improvements.

23 Under the ACE rule, performance standards
24 would be set by the owner or operator of the source

1 facility. The rule does not provide criteria that the
2 facility must meet. The operator sets the facility's
3 schedule for attaining compliance with the operator's
4 own standards.

5 There is no deadline, no guidelines or bench
6 marks are provided to assist the operator's evaluation
7 of progress for detainment.

8 The proposed DAQ Rule 45CSR44 mirrors the ACE
9 rule and has the same unacceptable shortcomings.
10 Adoption of this rule will be ineffective in slowing the
11 disastrous effect of climate change.

12 In West Virginia, short term effects will also
13 be undesirable and costly. People who suffer from
14 diseases such as asthma and COPD are depending on the
15 DAQ to ensure air quality that is no injurious to their
16 health. The DAQ must reject the weak standards of the
17 ACE rule and join the many states that are maintaining
18 standards that protect the health and safety of the
19 people both in the short term and for generations to
20 come. Thank you.

21 MS. HAMMONDS: Thank you.

22 If you did not register to comment but like to
23 at this time, please use the Raise Your Hand feature or
24 comment in Chat and we will recognize you to provide

1 your comments.

2 Mr. Kotcon, please unmute your line and
3 provide your comments.

4 JAMES KOTCON

5 MR. KOTCON: My name is James Kotcon. I am
6 the conservation chair for the West Virginia chapter of
7 Sierra Club, and I'm commenting on behalf of our 2,600
8 members.

9 The Sierra Club is opposed to the proposed
10 45CSR44 rule. It falls short in a large number of ways
11 which have already been mentioned by other speakers. I
12 would comment this rule is so bad that attorneys channel
13 from over 20 states, various cities, and numerous other
14 organizations are appealing the EPA ACE rule.

15 It's so bad that I think the very excellent
16 staff at DAQ must be truly embarrassed to propose such a
17 nothingburger of a rule.

18 Some really specific comments: § 1.1a omits
19 major sources of greenhouse gases by focusing solely on
20 coal-fired electric generating units. The rule should
21 be amended to include gas-fired generating stations,
22 compressor stations, and other fossil fuel industrial
23 boilers.

24 In §1.1b and others, the best systems of

1 emissions reductions is arbitrarily limited to heat rate
2 improvements. It neglects a wide range of other
3 technologies including carbon capture sequestration,
4 fuel switching, or use of renewables for energy
5 efficiency.

6 Really troubling to me, the rule limits the
7 definition of greenhouse gas in §2.24 to only carbon
8 dioxide. Even the EPA ACE rule does not have such a
9 restrictive definition. It is scientifically
10 indefensible to omit methane, nitrous oxide, ozone and
11 other greenhouse gases and they need to be included as
12 regulated greenhouse gases.

13 It is not clear why this rule and the ACE rule
14 on which it is based, limits the applied facilities to
15 those that commenced construction before January 2014.
16 The rule should be amended to include new facilities as
17 well.

18 There are a number of provisions particularly
19 in §4.4 that directs the owner or operator to proposed a
20 performance standard but doesn't really offer any
21 specific criteria for a performance standard. As such,
22 owners and operators are allowed to offer any kind of a
23 voluntary standard they want. It's just a request to do
24 whatever you think is best rather than an explicit set

1 of standards and criteria that must be met.

2 This kind of approach simply does not
3 recognize the seriousness of the climate crisis nor does
4 it offer an emissions control strategy adequate to
5 address the climate crisis. The EPA must set the
6 standards and criteria performance that the regulated
7 units must meet. They must set an allowable emissions
8 rate intended to meet the kinds of reductions in
9 greenhouse gas emissions needed to address the climate
10 crisis.

11 By allowing individual facilities to not only
12 propose their own rules, but to offer site specific
13 factors such as cost or age of the facility, it invites
14 facilities to propose the weakest possible standard and
15 it prevents a real competitive disadvantages to those
16 facilities that do adopt more stringent standards.

17 As such, this rule creates, intent is for a
18 race to the bottom that undermines any serious effort to
19 reduce greenhouse gas emissions.

20 §4.11 allows the applicant to propose a
21 compliance schedule, does not impose any kind of
22 deadlines other than that the Secretary should adopt
23 increments of progress. This is basically an invitation
24 for delays and failure to comply.

1 The rule needs to be amended to propose a firm
2 deadline for compliance as soon as practical but
3 certainly not later than 2022, two years from now.

4 Finally, §5.4 allows the Secretary to consider
5 the "remaining useful life" of a unit but does not
6 define what that remaining useful life is. This needs
7 to be set at a relatively short period, preferably less
8 than five years and we support making a shutdown date a
9 permanent requirement for any such exemption.

10 I have a number of other comments and I hope
11 you have received the emails that we have filed earlier
12 this afternoon. Thank you.

13 MS. HAMMONDS: Thank you.

14 Angie Rosser, if you will unmute your line and
15 please provide your comments.

16 ANGIE ROSSER

17 MS. ROSSER: All right. Thank you. My name
18 is Angie Rosser. I'm representing the West Virginia
19 Rivers Coalition, and in that role I represent our
20 members' concerns about the impacts of climate change on
21 water security, wildlife habitat, and public health.

22 And in looking at this rule it's really
23 unclear, if not contrary, to what the science guides us
24 on this, is that we need to take action to reduce

1 greenhouse gases in order to mitigate the climate
2 disruption ahead of us and the costs that come with it.

3 And my question is, in what way does this
4 proposed rule and state plan match the goals of the
5 scientists and panels such as the intergovernmental
6 panel on climate change recommendations to reduce
7 greenhouse gas emissions.

8 As has been stated by other speakers, this
9 rules reads, speaks of extreme subjectivity. There's a
10 lot of judgement calls and discretion that the Secretary
11 has afforded on this and it kind of flies in the face of
12 what I've heard from industry groups in terms of wanting
13 consistency and certainty when it comes to regulation.

14 I'm seeing nothing that really leans in that
15 direction. I'm seeing case-by-case evaluations about
16 what appropriate standards are. As has been mentioned,
17 the operator proposes what the standards are and they
18 have outs if they can make it an argument for
19 unreasonable costs.

20 We would share the concerns that have been
21 voiced in terms of compliance schedules with no end date
22 in sight. I have seen compliance schedules -- they can
23 be justified in certain circumstances but not extended
24 for decades which I have seen happen.

1 You know, one last comment, when I -- what's
2 been discussed already in terms of cost and it was
3 interesting to read the narrative in the rule about the
4 economic input, impact of the rule on the state or
5 residents.

6 And I would like to hear why the DEP did not
7 address or ignored health costs or if this would result
8 in any health costs or other costs to residents or the
9 state in terms of if we do not address these needed
10 reductions.

11 We know we will be facing increased weather,
12 extreme weather events, more flooding. Just in the past
13 four years, flooding has cost the state and its
14 residents nearly \$1 billion.

15 And the last question I have is in that same
16 section around costs, there's an assertion, a statement
17 that says the West Virginia coal-fired power plant fleet
18 is one of the most efficient in the country and I would
19 like to know -- I find that interesting and would like
20 to know more about the basis of that assertion and what
21 data and what matrixes were used to come to that
22 conclusion.

23 And thanks for the opportunity to comment
24 tonight.

1 MS HAMMONDS: Thank you.

2 Mr. Dave White, if you would please unmute
3 your line and provide your comments.

4 DAVID WHITE

5 MR. WHITE: Yeah. All's going to be fine.

6 I'm Dave White with the Atlantic and
7 Appalachian Defense Counsel. I'm commenting on proposed
8 Rule 45CSR44, Control of Greenhouse Gas Emissions from
9 Existing Coal-Fired Electric Utility Generating Units.

10 Gutless volley. A nothingburger, as I heard
11 another commenter mention. By design of course, why
12 even add pretense to the farce by calling the proposed
13 45CSR44 "control of greenhouse gas emissions," since
14 clearly it does not propose to control anything.

15 "Heat rate improvements which target achieving
16 lower carbon dioxide emission rates at designated
17 facilities." Neural network and intelligent soot
18 blowers, boiler feed pumps, air heater and duct leakage
19 control, variable frequency drives, blade path upgrades,
20 economizer redesign and replacement, and improved
21 operating and maintenance practices. These are process
22 operating improvements.

23 If West Virginia's fleet of coal-fired power
24 plants can achieve CO2 emission rate reductions by these

1 trivial maintenance and operational improvements then
2 the end must be near for them already. So there is the
3 silver lining.

4 While West Virginia is drug against its will
5 into the 21st Century, new markets and technology are
6 doing what the gutless coal-boy administrations of
7 Gaston Caperton, Cecil Underwood, Bob Wise, Joe Manchin,
8 Earl Ray, and the current corrupt slob with nods, i.e.,
9 make coal pay for its costs.

10 Good luck reclaiming those open strip jobs and
11 mountain-top removal projects when there's no money to
12 pay anyone to work them. Good luck reversing global
13 impacts of decades of burning coal knowing that we were
14 altering the chemistry of the atmosphere. How is your
15 president and his "leadership" doing in bring back coal?

16 There never was any war on coal but there
17 should have been. There should be now. Even as the
18 impacts of rising atmospheric CO2 levels and global
19 climate changes are manifesting themselves in real time
20 for all of us to see, here is West Virginia implementing
21 regulations to protect an industry dying of its own
22 weight.

23 For decades West Virginia could have led,
24 followed or got the hell out of the way but it didn't,

1 and now it's getting run over. West Virginia still
2 retains a wealthy legacy of natural beauty, resources,
3 and proud, resilient people. It's time to start working
4 toward a future that protects them all and not the
5 interests profiting from continued coal-fired electric
6 generation.

7 This proposed regulation is benisoned to a
8 dying patient. It is time to move on to renewable,
9 sustainable solutions and cease the legislative and
10 regulatory coddling of an industry that has externalized
11 the costs of its global impacts.

12 We you've dug yourself a hole, maybe you ought
13 to stop digging, dumb ass. Sincerely, David White.

14 And I would note that I address my comments to
15 Governor Justice and Director Caperton.

16 Thank you very much.

17 MS. HAMMONDS: Thank you. If anyone else did
18 not register to comment but would like to at this time,
19 please use the Raise Your Hand feature or comment in the
20 Chat and we will recognize you to provide your comments.

21 Laura, I believe everyone who raised their
22 hand has had an opportunity to comment.

23 MS. JENNINGS: Okay. Thank you, Stephanie.

24 There being nothing further, this public

1 hearing for proposed Rule 45CSR44 is concluded. There
2 are no further public hearings this evening.

3 I thank you all for your interest and for taking the
4 time to attend this hearings this evening.

5 Good evening.

6 -- oOo --

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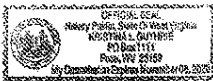
1 STATE OF WEST VIRGINIA

2 COUNTY OF KANAWHA, to wit:

3 I, Kristina Guthrie, Professional Reporter and
4 Notary Public within and for the County and State
5 aforesaid, duly commissioned and qualified, do hereby
6 certify that the foregoing proceedings were duly
7 transcribed by me from stenographic notes taken in the
8 foregoing proceedings to the best of my skill and
9 ability.

10 I do further certify that the said proceedings
11 were correctly taken by me in shorthand notes, and that
12 the same were accurately written out in full and reduced
13 to typewriting by means of computer-aided transcription.

14 Given under my hand this 5th day of August,
15 2020.



Kristina Guthrie

19
20 Kristina Guthrie, Professional
Reporter and Notary Public

\$	Adoption 7:10	billion 13:14	coal-fired 6:10 8:20 13:17	country 13:18
\$1 13:14	Affordable 5:9,18 6:1,20	boilers 8:23	Coalition 11:19	create 5:23
1	afforded 12:11	bottom 10:18	combined 6:11	creates 10:17
1.1a 8:18	afternoon 11:12	BSER 6:9	commenced 9:15	crisis 10:3,5,10
1/1,000th 6:15	age 10:13	burden 5:13	comment 5:7 7:22, 24 8:12 13:1,23	criteria 7:1 9:21 10:1,6
2	ahead 12:2	C	commenter 5:1	Curfman 5:2,4,5
2,600 8:7	Alleen 5:2,4	calls 12:10	commenting 5:5 8:7	cycle 6:11
20 8:13	allowable 10:7	caption 9:3	comments 5:3 8:1,3,18 11:10,15	DAQ 5:8 7:8,15,16 8:16
2014 9:15	allowed 9:22	carbon 9:3,7	competitive 10:15	data 13:21
2017 5:15	allowing 10:11	care 5:13	compliance 7:3 10:21 11:2 12:21, 22	date 11:8 12:21
2022 11:3	amended 8:21 9:16 11:1	case-by-case 12:15	comply 6:3 10:24	deadline 7:5 11:2
2050 6:16	Angie 11:14,16,18	certainty 12:13	components 6:9, 14	deadlines 10:22
4	appealing 8:14	chair 8:6	compressor 8:22	decades 12:24
45CSR44 5:8 7:8 8:10	applicant 10:20	challenged 5:11	concerns 11:20 12:20	define 11:6
A	applied 9:14	change 5:20,22 7:11 11:20 12:6	conclusion 13:22	definition 9:7,9
ACE 6:13,16,23 7:8,17 8:14 9:8,13	approach 10:2	channel 8:12	conservation 8:6	delays 10:24
achieved 6:6	arbitrarily 9:1	chapter 8:6	considered 5:14	DEP 13:6
Act 6:4	argument 12:18	Chat 7:24	consistency 12:13	depending 7:14
action 11:24	assertion 13:16,20	chronic 5:15	construction 9:15	detrainment 7:7
added 5:13	assist 7:6	circumstances 12:23	contrary 11:23	difficult 5:24
additional 6:21	asthma 7:14	cities 8:13	contributing 5:20	dioxide 6:19 9:8
Additionally 5:18	attaining 7:3	citizen 5:6	control 10:4	direction 12:15
address 5:19 10:5, 9 13:7,9	attorneys 8:12	Clean 5:9,10,18 6:1,4,20	COPD 7:14	directs 9:19
addresses 6:13	B	clear 9:13	cost 5:17 10:13 13:2,13	disadvantages 10:15
adequate 10:4	bad 8:12,15	climate 5:20,22 7:11 10:3,5,9 11:20 12:1,6	costly 7:13	disastrous 7:11
adopt 10:16,22	based 6:9 9:14	Club 8:7,9	costs 5:14,19 12:2, 19 13:7,8,16	discretion 12:10
	basically 10:23	CO2 6:16		discussed 13:2
	basis 13:20	coal 6:21		disease 5:16
	behalf 5:5 8:7			diseases 7:14
	bench 7:5			

disruption 12:2	expensive 5:12	gas-fired 8:21	impacts 11:20	January 9:15
due 6:22	explicit 9:24	gases 8:19 9:11,12 12:1	implement 5:12	join 7:17
<hr/> E <hr/>	extended 12:23	gasses 6:17	Implementation 6:7	Judgement 12:10
earlier 11:11	extreme 12:9 13:12	generating 8:20, 21	impose 10:21	justified 12:23
earth 5:23	<hr/> F <hr/>	generations 7:19	improvements 6:10,22 9:2	<hr/> K <hr/>
economic 5:15 13:4	face 12:11	goals 12:4	include 8:21 9:16	kind 9:22 10:2,21 12:11
effect 6:2 7:11	facilities 9:14,16 10:11,14,16	grandchildren's 5:22	included 9:11	kinds 10:8
effects 7:12	facility 7:1,2 10:13	greenhouse 6:3, 17 8:19 9:7,11,12 10:9,19 12:1,7	including 9:3	Kotcon 8:2,4,5
efficiency 9:5	facility's 7:2	groups 12:12	Increase 6:20	<hr/> L <hr/>
efficient 13:18	facing 13:11	guidelines 7:5	increased 6:11,12 13:11	large 8:10
effort 10:18	factors 10:13	guides 11:23	increasingly 5:19	leans 12:14
electric 8:20	fails 5:19	<hr/> H <hr/>	increments 10:23	life 5:22,23 11:5,6
emails 11:11	failure 10:24	habitat 11:21	indefensible 9:10	limited 6:16 9:1
embarrassed 8:16	falls 8:10	HAMMONDS 7:21 11:13	individual 10:11	limits 9:6,14
emission 6:7	feature 7:23	Hand 7:23	industrial 8:22	lot 12:10
emissions 6:3,6, 15,16,19 9:1 10:4, 7,9,19 12:7	filed 11:11	happen 12:24	industry 5:11 12:12	lower 5:16
encourage 6:21	Finally 11:4	health 5:13 7:16,18 11:21 13:7,8	ineffective 7:10	<hr/> M <hr/>
end 12:21	find 13:19	hear 13:6	injurious 7:15	maintaining 7:17
energy 5:9,18 6:1, 12,21 9:4	firm 11:1	heard 12:12	input 13:4	major 8:19
ensure 7:15	fleet 13:17	heat 9:1	intended 10:8	make 5:7,15 12:18
EPA 8:14 9:8 10:5	files 12:11	heat-rate 6:10,22	intent 10:17	making 11:8
EPA's 5:9 6:2	flooded 13:12,13	highest 5:16	interested 5:6	marks 7:6
estimated 6:20	floods 5:21	hope 11:10	interesting 13:3, 19	match 12:4
evaluation 7:6	focusing 8:19	human 5:23	Intergovernmenta l 12:5	matrixes 13:21
evaluations 12:15	fossil 8:22	<hr/> I <hr/>	invitation 10:23	meet 7:2 10:7,8
events 5:21 13:12	fourth 5:16	ignoring 5:20	invites 10:13	members 8:8
excellent 8:15	fuel 8:22 9:4	impact 13:4	<hr/> J <hr/>	members' 11:20
exemption 11:9	fully 6:3		James 8:4,5	mentioned 8:11 12:16
existing 6:5	<hr/> G <hr/>			met 10:1
	gas 6:3,11 9:7 10:9,19 12:7			

methane 6:17 9:10	outs 12:18	provided 7:6	reliance 6:22	scientifically 9:9
mirror 5:9	owner 6:24 9:19	providing 5:6	remaining 11:5,6	scientists 12:5
mirrors 7:8	owners 9:22	provisions 9:18	renewable 6:12	Secretary 10:22 11:4 12:10
mitigate 6:2 12:1	oxide 6:19 9:10	public 5:7 11:21	renewables 9:4	section 13:16
N	ozone 6:17 9:10	Q	replaces 5:10	security 11:21
narrative 13:3	P	quality 7:15	represent 11:19	sense 5:15
nation 5:17	panel 12:6	question 12:3 13:15	representing 11:18	sequestration 9:3
national 6:15	panels 12:5	R	request 9:23	seriousness 10:3
natural 6:11	past 13:12	race 10:18	requirement 5:11 11:9	set 6:24 9:24 10:5,7 11:7
needed 10:9 13:9	people 7:13,19	Raise 7:23	residents 13:5,8, 14	sets 7:2
neglects 9:2	performance 6:4, 23 9:20,21 10:6	range 9:2	respiratory 5:16	share 12:20
nitrogen 6:19	period 11:7	rate 5:15 9:1 10:8	responsibility 6:2	short 7:12,19 8:10 11:7
nitrous 9:10	permanent 11:9	read 13:3	restrictive 9:9	shortcomings 7:9
nothingburger 8:17	plan 5:10 12:4	reads 12:9	result 13:7	shutdown 11:8
number 8:10 9:18 11:10	plant 13:17	real 10:15	revise 5:8	Sierra 8:7,9
numerous 8:13	plants 6:10	received 11:11	Rivers 11:19	sight 12:22
O	pollutant 6:8	recognize 7:24 10:3	role 11:19	significant 6:17
offer 9:20,22 10:4, 12	pollution 6:5	recommendation s 12:6	Rosser 11:14,16, 17,18	similar 5:21
omissions 6:14	power 5:10 6:10 13:17	reduce 5:17 10:19 11:24 12:6	rule 5:9,10,18 6:1, 13,16,21,23 7:1,8, 9,10,17 8:10,12,14, 17,20 9:6,8,13,16 10:17 11:1,22 12:4 13:3,4	simply 10:2
omit 9:10	practical 11:2	reduction 6:8,14	rules 10:12 12:9	site 10:12
omits 8:18	preferably 11:7	reductions 6:6 9:1 10:8 13:10	S	slowing 7:10
operator 6:24 7:2 9:19 12:17	prevents 10:15	reflect 6:6	safety 7:18	small 6:15
operator's 7:3,6	private 5:6	register 7:22	schedule 7:3 10:21	solely 8:19
operators 9:22	progress 7:7 10:23	registered 5:1	schedules 12:21, 22	source 6:8,24
opportunity 5:7 13:23	propose 8:16 10:12,14,20 11:1	regulated 9:12 10:6	science 11:23	sources 6:5 8:19
opposed 8:9	proposed 7:8 8:9 9:19 12:4	regulation 5:8 12:13		speakers 8:11 12:8
order 12:1	proposes 12:17	reject 7:16		speaks 12:9
organizations 8:14	protect 7:18			specific 8:18 9:21 10:12
	provide 5:2 7:1,24 8:3 11:15			specifies 6:4
				staff 8:16

standard 9:20,21, 23 10:14	undermines 10:18	years 11:3,8 13:13	
standards 5:14 6:5,23 7:4,16,18 10:1,6,16 12:16,17	undesirable 7:13		
state 12:4 13:4,9, 13	unit 11:5	\$	
stated 12:8	units 6:12 8:20 10:7	\$1.1b 8:24	
statement 13:16	unmute 5:2 8:2 11:14	\$2.24 9:7	
states 7:17 8:13	unreasonable 12:19	\$4.11 10:20	
stations 8:21,22	urgent 5:19	\$4.4 9:19	
strategy 10:4	utilization 6:11	\$5.4 11:4	
stringent 10:16	V		
subjectivity 12:9	Virginia 7:12 8:6 11:18 13:17		
suffer 7:13	voiced 12:21		
sulfur 6:19	voluntary 9:23		
support 6:2 11:8	W		
sustain 5:24	wanting 12:12		
switching 9:4	water 11:21		
system 6:7	ways 8:10		
systems 8:24	weak 7:16		
T	weaker 5:14		
technologies 9:3	weakest 10:14		
term 7:12,19	weather 5:21 13:11,12		
terms 12:12,21 13:2,9	West 7:12 8:6 11:18 13:17		
time 5:22 7:23	wide 9:2		
tonight 13:24	wildfires 5:21		
troubling 9:6	wildlife 11:21		
U	Y		
unacceptable 7:9	year 6:16		
unbated 5:23			
unclear 11:23			

DAQ Public Hearing - Proposed 2021 Legislative Rules
Registration to Virtually Attend - July 28, 2020

ID	Start time	Completion time	First Name	Last name	Email Address	Organization (if not affiliated with a group, type "Self")	Street Address	City, State and Zip Code
1	6/15/2020 12:56	6/15/2020 12:56	Stephanie	Hammonds	Stephanie.E.Hammonds@wv.gov	WVDEP-DAQ	601 57th Street, SE	Charleston, WV 25304
2	6/22/2020 17:52	6/22/2020 17:54	Edward	Andrews	edward.s.andrews@wv.gov	WVDEP/Division of Air Quality	601 57th Street, SE	Charleston, WV 25304
3	6/29/2020 11:52	6/29/2020 12:04	Kaitlin	Meszaros	meszaros@pinyon-env.com	Pinyon Environmental, INC.	3222 S. Vance Street, Suite 200	Lakewood, CO 80227
4	7/7/2020 10:44	7/7/2020 10:46	Todd	Shrewsbury	todd.h.shrewsbury@wv.gov	West Virginia Division of Air Quality	601 57th Street SE	Charleston, WV 25304
5	7/7/2020 10:51	7/7/2020 10:53	Laura	Crowder	Laura.M.Crowder@wv.gov	WVDEP DAQ	601 57th Street, SE	Charleston, WV 25304
6	7/7/2020 13:53	7/7/2020 13:54	Laura	Jennings	laura.m.jennings@wv.gov	WV DAQ	601 57th Street, SE	Charleston, WV 25304
7	7/9/2020 16:56	7/9/2020 16:58	Trevor	Galley	trevor_galley@tcenergy.com	TC Energy	1700 MacCorkle Ave SE	Charleston, WV 25314
8	7/13/2020 14:52	7/13/2020 14:54	David	Flannery	dave.flannery@steptoe-johnson.com	Steptoe & Johnson PLLC	Chase Plaza 17th Floor	25302
9	7/20/2020 8:43	7/20/2020 8:45	David	Fewell	david.r.fewell@wv.gov	WVDAQ	601 57th Street, SE	Charleston, WV 25304
10	7/20/2020 16:58	7/20/2020 16:59	Aileen	Curfman	acurfman@gmail.com	West Virginia Sierra Club	1067 Comstock Dr.	Shepherdstown, WV 25443
11	7/27/2020 14:15	7/27/2020 14:16	Aileen	Curfman	acurfman@gmail.com	West Virginia Sierra Club	1067 Comstock Dr.	Shepherdstown, WV 25443
12	7/27/2020 16:34	7/27/2020 16:35	Jason	Wandling	jason.e.wandling@wv.gov	WVDEP	601 57th St. SE	Charleston, WV 25301
13	7/27/2020 17:58	7/27/2020 17:58	Kaitlin	Meszaros	meszaros@pinyon-env.com	Pinyon Environmental, Inc.	3222 S. Vance Street Suite 200	Lakewood, CO 80227
14	7/28/2020 11:08	7/28/2020 11:09	Bev	McKeone	beverly.d.mckeone@wv.gov	WVDEP, DAQ	601 57th Street SE	Charleston WV 25304
15	7/28/2020 11:51	7/28/2020 11:52	David	White	envattorney2013@gmail.com	Appalachian and Atlantic Defense Council	179 Church Street	Chillicothe, Ohio 45601
16	7/28/2020 12:12	7/28/2020 12:13	James	Kotcon	jkotcon@gmail.com	West Virginia Chapter of Sierra Club	PO Box 4142	Morgantown, WV 26504
17	7/28/2020 13:38	7/28/2020 13:40	Sandra	Adkins	sandra.k.adkins@wv.gov	WVDEP	601 57th Street, SE	Charleston, WV 25304
18	7/28/2020 14:23	7/28/2020 14:28	Fred	Tipane	frederick.tipan@wv.gov	WV DEP/DAQ	601 57th ST SE	Charleston, WV 25304
19	7/28/2020 15:35	7/28/2020 15:36	Terry	Fletcher	terry.a.fletcher@wv.gov	WVDEP	123 Swarthmore Ave.	Charleston, WV 25302
20	n/a - Added by LMJ 7/29/20		Angie	Rosser		West Virginia Rivers Coalition	3501 MacCorkle Ave SE #129	Charleston, WV 25304