

The National Rural Electric
Cooperative Association

Comments on
State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units
Advance notice of proposed rulemaking

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Rae E. Cronmiller
Environmental Counsel
4301 Wilson Boulevard, EU 11-249
Arlington, VA. 22203-1860
(703) 907-5791 / rae.cronmiller@nreca.coop

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The National Rural Electric Cooperative Association (NRECA) appreciates the opportunity to comment on EPA's advance notice of proposed rulemaking for "State Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units," 82 Fed. Reg. 61,057 (Dec. 28, 2017) (ANPRM).

NRECA is the national service organization for America's Electric Cooperatives. The nation's member-owned, not-for-profit electric cooperatives comprise a unique sector of the electric utility industry. Due to their size and structure, rural electric cooperatives face special challenges in adapting their operations to meet federal and state emissions restrictions. Those circumstances give rural electric cooperatives a valuable perspective on the nature and scope of any new guidelines for greenhouse gas emissions from existing electric generating units (EGUs) EPA might propose or adopt.

NRECA represents the interests of the nation's nearly 900 rural electric utilities. Our members are responsible for keeping the lights on for more than 42 million people across 47 states and over 70% of the United States land mass in the lower 48 states. Electric cooperatives power communities and empower their residents to improve their quality of life. Affordable electricity is the lifeblood of America's economy. For 75 years electric cooperatives have proudly shouldered the responsibility of bringing electricity to rural parts of this country. Because of their critical role in providing affordable, reliable, and universally accessible electric service, electric cooperatives are vital to the economic health of the communities they serve.

America's electric cooperatives serve all or part of 88% of the nation's counties and 13% of the nation's electric customers, while accounting for approximately 11% of all electricity sold in the United States. NRECA's member cooperatives include 63 generation and transmission (G&T) cooperatives and 834 distribution cooperatives. The G&Ts are owned by the distribution

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cooperatives they serve. G&Ts generate and transmit power to nearly 80% of the distribution cooperatives, which in turn provide power directly to the end-of-the-line consumer-owners. Remaining distribution cooperatives receive power directly from other generation sources within the electric utility sector. NRECA members account for about 5% of national generation. On net, they generate approximately 50% of the electric energy they sell, purchasing the remaining 50% from non-NRECA members. All but three of NRECA's member cooperatives are "small business entities" as defined by the Small Business Administration. Distribution and G&T cooperatives share responsibility for serving their members by providing safe, reliable, and affordable electric service.

In 2015, EPA promulgated the Clean Power Plan (CPP), purporting to act under the authority of § 111(d) of the Clean Air Act, 42 U.S.C. § 7411(d). The CPP is unlawful and impracticable for numerous reasons. Those reasons have been set forth in great detail in NRECA's comments on the proposed CPP, and in the briefs filed on behalf of NRECA and many others and at oral argument in *State of West Virginia v. EPA*, No. 15-1363 (D.C. Cir.). NRECA favors replacing the CPP with a new regulation governing EGU emissions of carbon dioxide.¹ Any replacement rule must comport with the limited authority over existing sources given EPA in § 111(d), and should be consistent with the existing regulations requiring that EPA issue *guidelines* to the states that reflect application of the best system of emission reduction (considering the cost of such reduction) that has been adequately demonstrated. Section 111(d) and its implementing regulations give each state broad discretion to set standards of performance for the individual units within its borders, based on these EPA-issued guidelines, after

¹ Indeed, due to the need for regulatory certainty, NRECA does not favor repealing the CPP without a ready replacement rule. NRECA therefore encourages EPA to propose a replacement rule in an expeditious manner and to finalize that at the same time, or in lieu of, any final rule repealing the CPP.

consideration by the state of various statutory and regulatory factors, including the unit's remaining useful life. The statute and regulations also give the individual states considerable leeway to allow compliance flexibility for the regulated sources, so that the rule makes economic as well as environmental sense. EPA's ANPRM addresses and seeks comment on several aspects of any such replacement rule, a few of which are of particular interest to NRECA and its members. Our thoughts on these are set forth below.

1. Any replacement rule should clarify the respective, proper roles of EPA and the states in setting emission standards for existing sources under § 111(d) of the Clean Air Act.

Section 111 of the Clean Air Act contemplates two separate regimes for establishing standards of performance for sources in regulated categories – one for new sources, including modified and reconstructed sources, set forth in § 111(b); and another for existing sources, set forth in § 111(d). Each establishes a unique set of specifically-defined roles for EPA and the states when it comes to establishing emission standards for the regulated sources. The CPP unlawfully conflated those roles when regulating existing sources under § 111(d), placing far more authority in EPA's hands than Congress intended and depriving states of authority and discretion that Congress expected them to have. For this reason, it is especially important that any replacement rule be clear about what is required by § 111 and who is to comply.

A. EPA determines the “best system of emission reduction” for both new and existing sources.

Both § 111(b) and § 111(d) are directed at setting a “standard of performance” for the particular sources regulated thereby. Given the way the statute is explicitly constructed, this means that EPA has the authority and the responsibility, under both § 111(b) and 111(d), to determine the “best system of emission reduction.”

The term “standard of performance” is defined in § 111(a)(1):

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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 nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

42 U.S.C. § 7411(a)(1).

In all cases under this definition, the applicable standard of performance is to be based on the “best system of emission reduction [BSER] ... (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements),” and in all cases the determination of what constitutes that BSER is based on *the Administrator’s* determination of what has been “adequately demonstrated.” In other words, whether regulating new sources under § 111(b) or existing sources under § 111(d), the EPA Administrator determines the BSER.²

B. EPA sets the standards of performance for new, modified, and reconstructed sources, while the individual states set, implement, and enforce the standards of performance for existing sources.

While, according to the express terms of the statute, EPA sets the BSER for all categories of sources, the statute is equally clear that the entity with the authority and responsibility for setting the standards of performance shifts depending on whether the source is a new source (including a modified or reconstructed source) or an existing source.

For new, modified, and reconstructed sources, § 111(b) governs and places the responsibility for establishing the standards of performance firmly in EPA’s hands. The section explicitly instructs that:

Within one year after the [listing] of a category of stationary sources ... the Administrator shall publish proposed regulations, establishing Federal standards of

² Note that this does not mean that the BSER for new sources and for existing sources in the same category will necessarily be the same. In fact, they may often be quite different, due to design constraints, the ability or inability to retrofit existing sources with the newest technology, location, costs, and other factors.

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performance for new sources³ within such category.... After considering [] comments, he shall promulgate, within one year after such publication, such standards with such modifications as he deems appropriate.

42 U.S.C. § 7411(b)(1)(B). The states can have a role in regulating new sources, but it is a more limited one, it is not primary, and it is not mandatory. Specifically, under § 111(c)(1), a state *may* implement and enforce the standards of performance applicable to new sources located in the state if that state submits to EPA, and EPA finds adequate, a procedure for implementing and enforcing the standards. 42 U.S.C. § 7411(c)(2). Absent such a submission and finding of adequacy, EPA retains full authority to implement and enforce a new source performance standard established under § 111(b).

For existing sources, the statute contemplates a very different regulatory structure. As discussed above, while EPA is still responsible for determining the BSER, the responsibility thereafter shifts primarily to the individual states. In the first instance, EPA's role is limited to "prescrib[ing] regulations which shall establish a procedure ... under which each State shall submit ... a plan which (A) establishes standards of performance for any existing source..., and (B) provides for the implementation and enforcement of such standards of performance." 42 U.S.C. § 7411(d)(1). So, EPA establishes the "procedure" pursuant to which the states submit their plans. Each state, however, has both the authority and the obligation under § 111(d) to establish, implement, and enforce the standards of performance applicable to existing sources within its borders. True, the standards of performance must be based on the BSER EPA has

³ "New source" is defined by § 111(a)(2), to include sources "the modification of which is commenced after the publication of regulations." Hence, section 111(b) also covers "modified" sources. Per EPA regulations, "modified" sources include sources that are "reconstructed" — that is, units that replace components to such an extent that the capital cost of the new components exceeds 50% of the capital cost of an entirely new comparable facility. 40 C.F.R. § 60.15(b)(1).

identified. But § 111(d) expressly reserves for the individual states the primary responsibility for setting, implementing, and enforcing the standards at individual sources.

Moreover, the statute expressly gives the state considerable discretion in fulfilling its responsibilities under § 111(d): “Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular sources under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.” *Id.* EPA’s longstanding general regulations governing § 111 confirm the breadth of the state’s discretion in this regard, providing that a State:

may provide for the application of less stringent emission standards or longer compliance schedules than those otherwise required ... provided that the State demonstrates with respect to each such facility (or class of facilities):

- (1) Unreasonable cost of control resulting from plant age, location, or basic design process;
- (2) Physical impossibility of installing necessary control equipment; or
- (3) Other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.

40 CFR § 60.24(f).

In other words, § 111(d) contemplates that a state has the authority and the discretion to establish a separate standard of performance for each existing source within its borders. That source-specific inquiry may be based on the state’s evaluation of that source and its assessment of the extent to which, and the timeframe on which, that source can adopt the EPA-determined BSER after considering whether the costs of adopting the BSER at a source are reasonable given the source’s design, location, and remaining useful life; whether it is even physically possible to implement the BSER at that source; and whether other factors merit application of a less-

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stringent standard or a longer ramp-up time. In short, unlike new source performance standards, which are developed from the top down based on a uniform implementation of BSER by every new source, existing source standards are built from the bottom up, based on each state's survey of how much of the BSER each existing source in the state can reasonably implement.

This does not mean that there is no role for EPA after determining BSER for existing sources or that states have unfettered discretion in establishing standards of performance for existing sources within their borders or in implementing or applying those standards to individual sources. Where a state fails to submit the required standards of performance or fails to implement or enforce those standards, EPA must step in. 42 U.S.C. § 7411(d)(2). But EPA's role is a modest, backstop role, reserved for the extreme and unlikely circumstance in which a state either fails to act at all or at least fails to act in a way that is reasonable.

By placing in the states' hands the primary responsibility for establishing, implementing, and enforcing standards of performance for existing sources, and by expressly giving the states broad discretion to consider an existing source's remaining useful life and other factors in determining the extent to which the standard of performance applies, Congress made clear that it envisions that EPA will be highly deferential to the states' source-specific determinations. Accordingly, in any replacement rule EPA ought to make clear that it may disapprove a state plan (including establishment of a standard of performance or application of that standard of performance to an individual source in the state) only if EPA determines that the state has acted arbitrarily or capriciously in assessing the factors that led the state to exempt or apply a less stringent standard of performance to an individual source. Under this framework, states would be afforded the same high level of deference that EPA itself gets in approving a SIP, a permit, or

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any other action requiring exercise of the Agency's scientific and technical expertise and evaluation of facts.

EPA is still very much free to make recommendations to the states about how to develop or implement their reasonable standards of performance. EPA might, for example, recommend that states not include in their plans standards of performance that exceed the requirements of the Clean Air Act, given that EPA must approve or disapprove the state's plan and that EPA has no authority to enforce standards that might or might not comport with state law but that clearly exceed EPA's authority to promulgate under the Clean Air Act. To that end, NRECA encourages EPA to consider including in any replacement rule a provision stating that EPA will not approve or federalize any portions of a state's plan, including its standards of performance, that exceed the Clean Air Act's requirements. While this could result in state plans that are only partially-approved, it would avoid inappropriately subjecting to federal enforcement those plan provisions that are beyond EPA's own authority to promulgate. Such an approach would be consistent with the general regulations governing adoption and submittal of state plans. Among other things, those regulations recognize that, while states may exercise their own authority to impose more stringent requirements, the fact that states have chosen to do so does not mean those requirements are federally enforceable. *See* 40 C.F.R. § 60.25(g). Such an approach could also encourage states to keep any state-law-based plan provisions separate and thus ease the determination of which provisions are enforceable in federal courts as matters of federal law and which are enforceable only in state courts as matters of state law.

EPA also has a role to play in giving content to arguably ambiguous terms in § 111. The term "stationary source," for instance, is defined in the statute as "any building structure, facility, or installation which emits or may emit any air pollutant." 42 U.S.C. § 111(a)(3). At most EGUs,

the only “building, structure, facility, or installation” that actually “emit[s]” air pollutants is the boiler island. EPA ought to consider, therefore, whether, in categorizing and regulating existing fossil fuel-fired EGUs, it is limited to regulating their boiler islands. If EPA decides that the definition of “stationary source” is ambiguous in that respect, EPA might also wish to consider promulgating a regulation limiting itself to regulating boiler islands under § 111(d).

2. Any new rule should clearly establish what constitutes the BSER.

Given EPA’s limited role under § 111, the principal purpose of any rule replacing the CPP must be to clearly define what constitutes BSER for existing fossil fuel-fired EGUs. Commenters may suggest different paths in that regard. BSER might, for instance, include a review of possible designs, equipment, work practice or operational standards, or combinations thereof that are already or could be implemented at individual existing sources.⁴ Regulated sources would be required to review such measures for operational and economic feasibility, based on each source’s unique circumstances. NRECA notes that, if EPA adopts this option, it is quite likely that many sources will already have adopted the BSER, for any of a variety of reasons; that does not indicate that the BSER is flawed in any way. To the contrary, it would simply tend to confirm that the BSER is adequately demonstrated, as required by the statute. NRECA recommends that, if EPA adopts this approach, it consider allowing affected facilities the option of implementing other measures that the facility shows will achieve an equivalent level of emission reduction. That might include, in addition to other technological or operational measures, the option of becoming a “synthetic minor” – that is, taking a permit limitation that would restrict the source’s hours or level of operation to keep its annual emissions at a level

⁴ This approach resembles the process employed by North Carolina in its draft rule under the CPP. That draft rule is directed at BSER at the emissions unit and references this ANPRM.

equivalent to or lower than that which would result from implementation of the BSER at that unit.

Alternatively, EPA might define BSER based on what has actually been demonstrated at a given unit. EPA used just that approach in 2015 when it promulgated the greenhouse gas New Source Performance Standards for modified fossil-fuel-fired steam generating EGUs. The compelling presumption here, as EPA points out in this ANPRM, is that each unit's best potential performance can be ascertained from the unit's historical performance. One way to implement such an approach would be to look at emissions from some averaging period during the previous five or ten years of a unit's operation. This method would rest on a number of practical assumptions, including:

- (1) due to the units' technical and operational characteristics, they regularly undergo physical and operational changes, including during major outages;
- (2) during these outages, units are repaired, resulting in increases in thermal efficiencies and, in turn, reduced carbon dioxide emissions due to economic and regulatory incentives and requirements; and
- (3) the carbon dioxide emissions reductions and economic benefits flowing from these types of changes are maximized after major outages, decrease over subsequent years, and must be repeated periodically if the emission reductions are to be restored.

When a unit returns to operation following a major outage, it is operating at its highest efficiency — and therefore the lowest level of emissions per megawatt hour of electricity generated. Any BSER adopted by EPA must recognize and take into account the inevitable decline in unit efficiency and emissions performance that comes with the passage of time. One way to do that is to define BSER as the rate at which the unit emits carbon dioxide during, for instance, the second or third year after a major outage — or perhaps an average across several years following a major outage — during which efficiency improvements were made.

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The principles underlying this latter approach are subject to practical considerations. In particular, under no circumstances should BSER be defined as the best one-year historical performance for a unit. Such an approach would be unworkable precisely because it would not take into account the inevitable emissions performance degradation following heat rate improvements and other unit repairs.

In considering approaches like the ones set out above, EPA might also wish to give states the option of choosing between alternative measures of BSER. Such an approach would be consistent with the Clean Air Act's cooperative federalism structure. As noted above, EPA might also consider including in the new rule something akin to a "synthetic minor" provision. If such a provision were included in the rule, it could allow units to satisfy their § 111(d) obligations by agreeing to restrict their total hours of operation during the year, or a total tonnage limit on annual emissions, thereby reducing their emissions to at least the same level that would be achieved by implementing BSER at the unit. Units could implement such an approach in lieu of certain other compliance measures. If any excess emission reductions from such curtailed units were recognized they might then serve as part of the basis for an emissions averaging program with other affected units that could provide further compliance flexibilities.

3. EPA should consider allowing emission averaging across units.

In promulgating a rule to replace the CPP, EPA should consider allowing units with a common designated owner or corporate parent or dispatch representative to average emissions across units, rather than having to comply with standards on a unit-by-unit basis. Among other things, emissions averaging will allow units to average ahead of time, rather than after-the-fact through purchased credits. This, in turn, will allow sources to better engage in long-term planning, which will improve reliability and lower costs for consumers.

4. EPA should weight a number of factors before pursuing subcategorization in any new rule.

In the ANPRM, EPA suggests the possibility of subcategorizing under § 111. Section 111(d) grants EPA authority to subcategorize among or between types of units for purposes of defining BSER. So, for example, EPA might identify one BSER for units burning Powder River Basin coal and a different BSER for units burning other types of coal. EPA could also distinguish between units based on the type of unit (i.e., baseload versus peaking). Before opting to subcategorize, however, EPA should consider whether subcategorization would lead to greater ease in implementation of the standard or to a more reliable supply of electricity. EPA should also consider whether such subcategorization is technically feasible.

5. EPA should include a dynamic reliability safety valve in any new rule.

The lack of a dynamic reliability safety valve was a major shortcoming in the CPP. In particular, for the communities served by cooperatives, there is an acute need for a dynamic reliability safety valve to account for extreme weather events or unexpected conditions. That is especially true given that co-ops have fewer generation options than other types of utilities for responding to unforeseen events — everything from heat waves or extreme cold spells to fuel shortages and the failure or unexpected retirement of other units, transmission lines, or pipelines — that can trigger power outages. Without a dynamic reliability safety valve in place, the risk of system failure rises significantly — particularly when extreme weather conditions occur, as was the case with the recent polar vortex, for example. EPA should therefore consider including a reliability safety valve in any replacement rule it proposes. A safety valve provision should include the suspension of any § 111(d) legal obligations or restrictions on unit operation for as

long as may be required to ensure or restore system reliability. The safety valve should be initiated by a petition to EPA requiring FERC consultation.

6. EPA should include sample state plan text as part of any new rule.

In the ANPRM, EPA asked about the advisability of providing sample state plan text. NRECA believes that providing sample state plan text could be helpful in providing states with clear direction in creating their plans. EPA may also wish to consider providing hypothetical examples of acceptable — and unacceptable — source-specific applications of BSER based upon the factors specified in § 111(d), 40 C.F.R. 60.24(f), or any other regulation adopted by EPA to govern implementation of a new rule. The ANPRM also identified some potential drawbacks of providing sample state plan text. Those drawbacks are not inconsiderable, but they can be minimized or eliminated if EPA includes instructions in the new rule clearly stating that the sample state plan text is not intended to and does not limit states' flexibility or ability to consider other factors unique to specific states and sources.

In addition, if included in the regulation, sample state plan text might be useful as a basis for presumptive approvability of state plans. In other words, if a state adopts a plan that adheres closely to the text of EPA's sample plan, the state's plan would be presumptively approvable.

G. State programs should be considered as compliance measures, but not for purposes of defining BSER.

Finally, the ANPRM asks about the interaction between state programs and a potential § 111(d) rule. NRECA believes that states with carbon dioxide reduction programs such as renewable portfolio standards or participation in carbon trading markets such as RGGI should be permitted to allow participation in, or compliance by a source's owners or operators with, such programs to count toward compliance with the state's obligations under § 111(d). NRECA

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understands that the issues associated with translating the emission reductions associated with such programs into terms that are equivalent to the emission rates associated with a § 111(d) standard are considerable, but NRECA also believes that the benefits of such an approach could more than outweigh the challenges.