



EPA Proposes Affordable Clean Energy Rule

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On August 21, 2018, the Environmental Protection Agency (EPA) issued a [proposed rule](#) pursuant to section 111(d) of the Clean Air Act (CAA) that would establish emission guidelines for states to develop plans to limit carbon dioxide (CO₂) emissions from existing fossil-fired power plants. The proposed Affordable Clean Energy (ACE) rule would replace the 2015 Clean Power Plan (CPP), which EPA is proposing to repeal (in a separate rulemaking) on the grounds that the CPP exceeded the agency's authority under the CAA.

Core elements of the proposed ACE rule include: (1) a determination of the best system of emission reduction (BSER) for CO₂ emissions from coal-fired power plants; (2) a list of "candidate technologies" states can use when setting CO₂ performance standards for affected plants; (3) a new preliminary applicability test for determining whether a physical or operational change made to a power plant may be a "major modification" triggering New Source Review (NSR); and (4) new implementing regulations for establishing emission guidelines under CAA section 111(d).

Section 111(d)

EPA is proposing the ACE rule pursuant to section 111(d) of the CAA. This section directs EPA to promulgate regulations establishing a federal-state process for setting standards of performance limiting emissions from existing sources for pollutants not otherwise regulated in other specified sections of the CAA. Implementing section 111(d) is a three-step process. First, EPA issues a "guideline" for states to use in developing compliance plans that include standards of performance for stationary sources within a particular source category. The guideline identifies what EPA determines is the BSER for the relevant sources within the source category. Second, each state submits a plan to EPA that includes standards of performance for the covered sources in the state. Third, EPA approves or disapproves of the state plans. If a state fails to submit an approvable plan, the CAA requires EPA to impose a federal plan.

Proposed BSER Determination

EPA is proposing to define BSER for CO₂ emissions from existing coal-fired power plants as heat-rate efficiency improvements based on a range of "candidate technologies." This "inside the fence" BSER determination reflects a different approach than what was used in the CPP. The CPP determined the BSER for power plants based on reductions achievable not only through inside-the-fence measures such as heat rate improvements but also through shifting of generation from higher-emitting to lower-emitting or zero-emitting plants. As noted above, EPA has proposed to find that such an "outside-the-fence" approach to determining BSER exceeds the agency's authority under the CAA.

EPA has identified a list of the "most impactful" heat rate improvement measures. EPA is proposing that this list serve as the "candidate technologies" or "checklist" of BSER technologies, equipment upgrades, and best operating and maintenance practices for coal-fired power plants. These candidate technologies are:

- Neural Network/Intelligent Sootblowers
- Boiler Feed Pumps
- Air Heater and Duct Leakage Control
- Variable Frequency Drives
- Blade Path Upgrade (Steam Turbine)

- Redesign/Replace Economizer
- Improved Operating and Maintenance Practices

States would consider the above technologies in establishing standards of performance for existing coal-fired power plants. EPA is proposing that performance standards will set a specific allowable emission rate expressed on a pound CO₂ per MWH-gross rate for each affected unit based on the application of the appropriate candidate BSER technologies to each unit.

EPA explains in the proposed rule that it does not have sufficient information to make a BSER determination with respect to heat rate improvements at natural gas-fired simple-cycle turbines or combined cycle turbines. The agency is soliciting comment on this issue. Previously, EPA determined that heat rate improvement measures at natural gas-fired combustion turbines would not be considered BSER because such measures cannot provide meaningful reductions at reasonable cost.

State Compliance Plans

The proposed rule would provide each state with broad discretion in establishing specific performance standards for particular plants. The proposal also allows state plans to rely on emission averaging and trading among affected coal-fired units at a particular plant. However, EPA has proposed that state plans should not be allowed to incorporate averaging and trading among different plants, such as a state-wide or interstate cap-and-trade program. Nor will any credit be given for CO₂ emissions reductions achieved through increased generation of renewable energy or gas-fired generation not covered under the section 111(d) regulatory program. The proposed rule explains that such an approach would be inconsistent with EPA's proposed "inside-the-fence" interpretation of BSER under section 111.

Permitting Under NSR Program

EPA is proposing revisions to the NSR permitting program to make it easier for power plants to adopt heat rate improvements without triggering NSR obligations. The NSR program is a preconstruction permitting program. An NSR permit is required not only before construction of a new major stationary source; it is also required before modifying an existing major source if the modification will result in a significant emissions increase of any NSR-regulated pollutant. Projects that cause a significant increase in annual emissions may trigger onerous NSR permitting requirements, which include installation of state-of-art emission control technologies, prescriptive air quality modeling, and extensive public notice and comment procedures.

To avoid widespread triggering of NSR permitting requirements from heat rate improvement projects undertaken by affected coal-fired plants, EPA is proposing to amend the NSR regulations to include an hourly emissions increase test. Under the proposed revisions, a non-excluded physical or operational change to an electricity generating unit would only trigger NSR if the change resulted in an increase in the unit's maximum hourly emissions rate under procedures proposed in the ACE rule, as well as a significant emission increase in annual emissions under the current NSR regulations.

As drafted, the proposed maximum hourly emission increase test would be available to any electricity generating unit, including natural gas-fired units that would not be subject to regulation under section 111(d).

States with approved NSR programs would have the option but would not be required to adopt the hourly emission increase test ultimately promulgated as part of the NSR provisions in their SIPs. For those states with delegated NSR programs that are acting on behalf of EPA, the NSR permitting process would have to include any changes that are ultimately made to the federal NSR provisions as they would be administering the federal program.

EPA is proposing that the potential revisions to the NSR permitting program are severable from the rest of the ACE rule.

Implementing Regulations for Emission Guidelines under Section 111(d)

The proposal revises the general implementing regulations for section 111(d) that govern how EPA issues emission guidelines, and how and when states develop and submit their plans. These changes would apply for all future section 111(d) rules. Proposed changes include the following:

- **Timing:** The proposal updates timing requirements regarding submission of state plans and EPA action on those state plans.
 - State submissions: EPA is proposing to provide states three years to develop state plans. The existing implementing regulations provide nine months.
 - EPA action: The proposal would allow EPA 12 months to act on a complete state plan submittal. The existing implementing regulations provide four months.
 - Federal plan: The proposal would allow EPA two years to issue a federal plan after a finding of a state's failure to submit an approvable plan. The existing implementing regulations provide six months.
- **Criteria for state plans:** The proposal has completeness criteria for state plans that include administrative materials and technical support for state implementation of the plan. EPA would have six months to determine completeness and would make that determination by comparing the state's submission against the completeness criteria.
- **Variance provisions:** The proposal provides greater flexibility to states to adopt plans that include variances from the EPA guidelines that will allow, among other things, states to take into account the remaining useful life of the unit and other relevant factors in establishing a performance standard for a particular affected unit.

Next Steps

EPA will take comment on the proposal for 60 days after publication in the Federal Register and will hold at least one public hearing. Depending on the exact date of Federal Register publication, this means comments will be due to EPA sometime in late October 2018.

Impacts of EPA Proposal

According to EPA, the proposed ACE rule would reduce the compliance burden by up to \$400 million per year when compared to the CPP. EPA estimates that the ACE rule could reduce overall 2030 CO₂ emissions by up to 1.5% from projected levels without the CPP.

For more information

Our professionals are available to provide counsel to affected entities as they assess the implications of the rule and prepare to submit comments to EPA. Van Ness Feldman will be preparing a comprehensive analysis of the proposal that will be available on a shared cost basis. Please contact [Kyle Danish](#), [Stephen Fotis](#), or any other professionals in Van Ness Feldman's [Environmental Practice](#) for additional information on the analysis or on other matters related to this rulemaking.

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