



FACT SHEET

Proposed ACE Rule – Legal Overview

- On August 21, 2018, the U.S. Environmental Protection Agency (EPA) proposed the Affordable Clean Energy (ACE) rule which would establish emission guidelines for states to develop plans to address greenhouse gas (GHG) emissions from existing coal-fired power plants.
- The ACE rule would replace the 2015 Clean Power Plan (CPP), which EPA has proposed to repeal because it exceeded EPA’s authority. The CPP was stayed by the U.S. Supreme Court and has never gone into effect.
- The proposed ACE rule is informed by the more than 270,000 public comments that EPA received on its December 2017 Advance Notice of Proposed Rulemaking.
- The ACE rule has several components: a determination of the best system of emission reduction (BSER) for GHG emissions from coal-fired power plants, a list of “candidate technologies” states can use when developing their plans, 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, and new implementing regulations for emission guidelines under Clean Air Act section 111(d).

CLEAN AIR ACT CONTEXT

- Section 111 of the Clean Air Act governs EPA’s establishment of New Source Performance Standards. Under section 111(b), EPA identifies the “best system of emission reduction” (BSER) that has been adequately demonstrated to control emissions of a particular pollutant from a particular type of source, and sets a standard for new sources based on the application of that BSER.
- The ACE rule is being proposed under section 111(d), which addresses *existing* sources. It sets a framework under which the states develop plans establishing standards of performance for their existing sources. The states then submit those plans to EPA for approval. Under section 111(d), EPA still determines the BSER, but, unlike with new sources under 111(b), here the *states* are the ones that actually establish performance standards.
- Implementing Section 111(d) is a three-step process:
 1. EPA issues guidelines that determine the Best System of Emission Reduction (BSER).
 - EPA evaluates technologies and practices that can be applied to or at a covered source to reduce emissions of a pollutant.
 - EPA is proposing to define BSER for GHG emissions from existing coal-fired power plants as heat-rate efficiency improvements based on a range of “candidate technologies”—an “inside the fence-line” determination that

focuses on how sources can perform better and does not attempt to force an accelerated shift to renewables at the grid-wide level.

- EPA is not setting a presumptive standard of performance. States will be given the flexibility to design a plan that, in the state’s judgment, will work best under its particular circumstances.
2. States will have three years from the date of the final rule to prepare and submit a plan that establishes a standard of performance.
 - The states establish standards of performance that reflect the degree of emission limitation achievable through the application of the BSER.
 - The states will determine which of the “candidate technologies” can be applied to their sources, and determine what emission reductions will result.
 - States have a better understanding of the sources within their borders and can consider the unique factors of each unit, such as technology and practices that are already being implemented, remaining useful life, *etc.*
 3. Once a state plan is submitted, EPA will have 12 months to evaluate and determine whether the plan can be approved. In the event a state does not submit a plan or fails to submit an approvable plan, EPA will then have two years to develop a federal plan for that state.
- The proposal returns to an interpretation of the Clean Air Act that is consistent with the Agency’s longstanding practice and historical understanding of the scope, and the limits, of its legal authority under section 111.
 - In particular, EPA proposes to define BSER as being limited to emission reduction measures that can be applied to or at an individual stationary source. This includes measures based on a physical or operational change to a building, structure, facility, or installation at that source.
 - Before the CPP, BSER for both new sources and existing sources under section 111 had always been limited to measures that could be carried out at the level of the individual facility (“inside the fence-line”). For the first time, the CPP went “outside the fence-line” and required states to shift their entire energy portfolio policy away from coal to natural gas, and away from fossil fuels generally to renewables. This unprecedented action was challenged by more than half the states, and was ultimately met by a similarly unprecedented stay from the United States Supreme Court.

BSER DETERMINATION

- EPA is proposing to determine that the BSER for GHG emissions from existing coal-fired power plants is a group of candidate technologies that lowers the CO₂ emission rate of affected sources. These technologies are often called heat rate improvements.

- When an electric utility generating unit (EGU) improves its heat rate, it produces electricity more efficiently. Such projects can help power plants produce the same amount of electricity with lower emissions and lower fuel costs.
 - Heat rate is the amount of energy input, typically measured in British thermal units (Btu), required to generate a unit of electricity, typically measured in kilowatt-hours (kWh).
 - A heat rate improvement project is designed to lower the heat rate of the EGU. The unit would consume less fuel per kWh and emit lower amounts of carbon dioxide (and other air pollutants) per kWh generated.
- Opportunities for heat rate improvements are source-specific and dependent upon the individual unit's design, configuration, age and operating and maintenance history.
- While a large number of heat rate improvement measures have been identified in a variety of studies conducted by government agencies and outside groups, some of those identified technologies have limited applicability and many provide only negligible heat rate improvement.
- EPA believes that it would be overly burdensome to require States to evaluate the degree of emission limitation achievable from the application of every conceivable measure at each source within their borders.
- Therefore, EPA has identified a list of the “most impactful” heat rate improvement measures that we are proposing to serve as the “candidate technologies” or “checklist” of BSER technologies, equipment upgrades, and best operating and maintenance practices.
- The 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 these technologies in establishing standards of performance for covered EGUs.
- EPA is not proposing a BSER for GHG emissions from natural gas-fired stationary combined cycle (NGCC) units. The proposal solicits comment on available systems of emission reduction for NGCC units.

HOW TO COMMENT

- Comments on the proposal should be identified by Docket ID No. EPA-HQ-OAR-2017-0355, and may be submitted by one of the following methods:

- **Online:** Go to <https://www.regulations.gov> and follow the online instructions for submitting comments to Docket ID No. EPA-HQ-OAR-2017-0355.
- **Email:** Comments may be sent to a-and-r-Docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2017-0355 in the subject line of the message.
- **Fax:** Fax your comments to: (202) 566-9744. Attention Docket ID No. EPA-HQ-OAR-2017-0355.
- **Mail:** Environmental Protection Agency, EPA Docket Center (EPA/DC), Mail Code 28221T, Attention Docket ID No. EPA-HQ-OAR-2017-0355, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- **Hand/Courier Delivery:** EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC 20004, Attention Docket ID No. EPA-HQ-OAR-2017-0355. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.
- For additional information, including the full EPA public comment policy, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

FOR MORE INFORMATION

- Additional fact sheets along with copies of the proposed rule and accompanying Regulatory Impact Analysis are available on EPA's website at <https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule>