

**FACT SHEET**  
**The Affordable Clean Energy Rule (ACE)**

**ACTION**

- On Wednesday, June 19, 2019, EPA issued the Affordable Clean Energy rule (ACE), an effort to provide existing coal-fired electric utility generating units, or EGUs, with achievable and realistic standards for reducing greenhouse gas (GHG) emissions.
- This action was finalized in conjunction with two related, but separate and distinct rulemakings:
  1. The repeal of the Clean Power Plan (CPP).
  2. Revised implementing regulations for ACE, ongoing emission guidelines, and all future emission guidelines for existing sources issued under the authority of Clean Air Act (CAA) section 111(d).
- ACE provides states with new emission guidelines that will inform the state's development of standards of performance to reduce carbon dioxide (CO<sub>2</sub>) emissions from existing coal-fired EGUs — consistent with EPA's role as defined in the CAA.

**PROMULGATING ACE AND ESTABLISHING EMISSION GUIDELINES**

- ACE establishes heat rate improvement (HRI), or efficiency improvement, as the best system of emissions reduction (BSER) for CO<sub>2</sub> from coal-fired EGUs.
  - Heat rate is a measure of the amount of energy required to generate a unit of electricity.
- By employing a broad range of HRI technologies and techniques, EGUs can more efficiently generate electricity with less carbon intensity.
  - An improvement to heat rate results in a reduction in the emission rate of an EGU (in terms of CO<sub>2</sub> emissions per unit of electricity produced).
- The BSER is the best technology or other measure that has been adequately demonstrated to improve emissions performance for a specific industry or process (a "source category"). In determining the BSER, EPA considers technical feasibility, cost, non-air quality health and environmental impacts, and energy requirements.
- The BSER must be applicable to, at, and on the premises of an affected facility.
- ACE lists six HRI "candidate technologies," as well as additional operating and maintenance practices.
- The six 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
- For each candidate technology, EPA has provided information regarding the degree of emission limitation achievable through application of the BSER as ranges of expected improvement and costs.

- States will establish unit-specific “standards of performance” that reflect the emission limitation achievable through application of the BSER technologies.
- These technologies, equipment upgrades, and best operating and maintenance practices were determined to comprise the BSER because they can be applied broadly and are expected to provide significant HRI without limitations due to geography, fuel type, etc.
- ACE recognizes that EPA’s statutory role is to determine the BSER and the degree of emission limitation achievable through application of the BSER, and that the states’ role is to develop plans that establish unit-specific standards of performance that reflect application of the BSER.
- The CAA provides that states establish the standards of performance and explicitly directs EPA to allow states to consider “the remaining useful life of the source” and other source-specific factors in establishing standards of performance.
- States will evaluate applicability to their existing sources of the six candidate technologies and improved operating and maintenance practices and take into consideration source-specific factors in establishing a standard of performance at the unit level.
- States will submit plans to EPA that establish standards of performance and include measures that provide for the implementation and enforcement of such standards.
- The plan submissions must explain how the state applied the BSER to each source – and how the state took other factors into consideration – in setting unit-specific standards. These plans are due in three years.

#### **BACKGROUND**

- ACE is promulgated under EPA’s authority in section 111 of the CAA.
- CAA section 111(d)(1) requires EPA to prescribe regulations under which states submit state plans for existing sources. This rulemaking’s legal interpretation more appropriately balances federal and state responsibilities as they are defined in the CAA.

#### **STAKEHOLDER INPUT**

- The advance notice of proposed rulemaking (ANPRM) for ACE received 270,000 public comments.
- The ACE proposal – which EPA issued in August 2018 – received 500,000 public comments and more than 200 people provided oral testimony at an October 1, 2018, public hearing in Chicago.

#### **FOR MORE INFORMATION**

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