The U.S. Environmental Protection Agency (EPA) finalized its repeal of the Clean Power Plan (CPP) and promulgated new emissions guidelines in the Affordable Clean Energy (ACE) rule. EPA based these actions on its conclusion that the CPP exceeded Clean Air Act (CAA) authority by using measures that applied to the power sector as a whole rather than measures carried out within an individual facility. Among other things, the final ACE rule establishes efficiency improvements as the "best system of emission reduction" (BSER) for existing coal-fired power plant greenhouse gas (GHG) emissions. Stakeholder views range from agreement with EPA's interpretation of its CAA authority and its BSER determination to legal challenges of the rule. In August 2019, some states and nongovernmental organizations filed petitions challenging the rule in the D.C. Circuit.

This Insight summarizes the rulemaking and discusses potential considerations for Congress.

Background

In August 2018, EPA proposed ACE in response to Executive Order (E.O.) 13783, which directed federal agencies to "review existing regulations and policies that potentially burden the development or use of domestically produced energy resources." Under E.O. 13783, EPA reviewed the CPP, which the agency promulgated in 2015 to limit GHG emissions from existing fossil-fueled power plants. The CPP was the subject of ongoing litigation and never went into effect.

EPA's review concluded that the CPP exceeded EPA's statutory authority. The agency therefore proposed repeal of the CPP in 2017 and proposed ACE to replace it in 2018.

The ACE proposal applied a narrower interpretation than the CPP of the BSER, defining it as on-site heat rate improvements for existing coal-fired units. EPA proposed two additional actions in ACE—one to revise the general regulations that implement CAA Section 111(d) and another to modify an applicability determination for New Source Review (NSR), the CAA preconstruction permitting program for new and modified stationary sources.

EPA Repealed CPP and Promulgated ACE

On July 8, 2019, EPA published "three separate" actions in one notice. First, EPA finalized repeal of the CPP, retaining its 2017 conclusion that the CPP exceeded EPA's statutory authority. Second, EPA promulgated ACE, which provides emission guidelines for states to use when they establish standards to reduce carbon dioxide (CO₂) emissions from
existing coal-fired units. Third, EPA finalized revisions to the general regulations implementing CAA Section 111(d). CRS discusses the legal basis for the CPP repeal in another publication (LSB10325). The remainder of this section discusses ACE and the implementing regulations.

The structure and major provisions of ACE largely resemble those EPA proposed in August 2018. For example, ACE defines BSER for existing, coal-fired power plant GHG emissions as "heat rate improvement" measures, also known as efficiency improvements. EPA stated that it lacked adequate information to establish a BSER for other types of existing fossil-fuel-fired units.

ACE does not establish a binding, numeric performance standard for CO2 emissions from existing coal-fired units. Rather, EPA identified six candidate technologies, which it characterized as the "most impactful" in the 2018 proposal, along with operating and maintenance practices that states "must evaluate" in establishing a standard of performance for that source in their state plans under CAA section 111(d)." Noting that many state and industry commenters requested a presumptive standard or additional clarity, EPA specified the "level of emissions reductions achievable using the candidate technologies." States, however, must ultimately establish a rate-based standard and have the option to establish performance standards reflecting a heat rate improvement "that falls outside of these ranges."

EPA discussed technologies and approaches excluded from the candidate technologies list. For example, EPA clarified that state plans could not use either averaging-and-trading or biomass cofiring as compliance measures. While EPA did not include carbon capture and storage as the BSER for existing units due to cost considerations, the agency concluded that state plans may authorize carbon capture and storage for ACE compliance.

EPA analyzed ACE and the CPP repeal impacts separately. The agency projected "modest" CO2 reductions (less than 1%) under the final ACE rule that "do not diverge dramatically" from a baseline, which excludes the CPP. EPA's separate CPP analysis projected CO2 reductions less than 1% and concluded that "there is likely to be no difference between a world where the CPP is implemented and one where it is not."

EPA also finalized revisions to the general implementing regulations under CAA Section 111. The revisions codify EPA's current interpretation that states have "broad discretion" to establish and apply emission standards consistent with BSER. Among other things, EPA lengthened the time for development and review of state plans.

EPA Postpones Decision Regarding NSR

EPA did not finalize the proposed revision to the applicability test for certain power plants under NSR. The NSR program generally requires installation of modern pollution controls when new facilities are built or when existing facilities make a change that substantially increases emissions. Historically, NSR applicability determinations have been contentious and extensively litigated. According to EPA, the proposal would prevent NSR from discouraging the installation of energy-efficiency measures. EPA stated that it intends to take final action on the proposed NSR changes at a later date.

Potential Issues for Congressional Consideration

The CPP and ACE reveal conflicting legal interpretations of CAA Section 111 authority and arguably raise broader questions about CAA regulation of GHG emissions. Issues for Congress may include the following:

- Whether the CAA provides explicit authority to cost-effectively reduce GHG emissions from integrated networks of stationary sources.
- Whether the CAA provides sufficient authority to meet GHG targets supported by some Members and stakeholders.
- Whether ACE will result in reductions needed to meet GHG targets supported by some Members and stakeholders.
- The implications of states establishing unique emission rates (e.g., pounds per megawatt-hour), in the absence of a mass-based limit (e.g., tons), for units in their jurisdictions. This approach may result in diverse state requirements
that present unwanted consequences.