

FACT SHEET
CARBON POLLUTION STANDARDS FOR FOSSIL FUEL-FIRED POWER PLANTS
FINAL RULE
SUPPORT FOR RELIABILITY

Summary

On April 25, 2024, the U.S. Environmental Protection Agency (EPA) announced final carbon pollution standards for existing coal-fired and new gas-fired power plants that will secure important climate benefits and protect public health. These rules will significantly reduce greenhouse gas (GHG) emissions from existing coal-fired power plants and from new natural gas turbines, ensuring that all long-term coal-fired plants and base load new gas-fired plants control 90% of their carbon pollution. Existing coal-fired power plants are the largest source of GHGs from the power sector. New natural gas-fired combustion turbines are some of the largest new sources of GHG being built today and these final standards will ensure that they are constructed to minimize their GHG emissions.

Consistent with EPA’s traditional approach to establishing pollution standards under the Clean Air Act, the final limits and emission guidelines are based on proven pollution control technologies that can be applied directly to power plants and can achieve substantial reductions in carbon pollution at reasonable cost. Emission guidelines for the longest-running existing coal units and performance standards for new base load combustion turbines are based on the use of carbon capture and sequestration/storage (CCS) – an available and cost-effective control technology that can be applied directly to power plants.

Support for Reliability

- EPA has carefully considered the importance of maintaining resource adequacy and grid reliability in developing the final rule, taking into consideration comments from and extensive engagement with balancing authorities, independent system operators and regional transmission organizations, state regulators, power companies, and other stakeholders.
- These final carbon pollution standards are crucial to addressing the urgent need to reduce climate-destabilizing carbon dioxide (CO₂) pollution from the power sector and represent an important part of the Agency’s broader efforts to address the multiple health and environmental impacts of the power sector while supporting the continued delivery of reliable and affordable electricity.
- The final rules incorporate multiple adjustments that help address reliability concerns. Affected sources, states, system planners and reliability authorities will continue to diligently plan for a reliable electric system, and these rule adjustments are meant to work in concert with the robust long-term planning processes and policy frameworks that currently exist to support grid reliability.

- EPA has an exemplary and decades long track record of addressing air pollution in the power sector while enabling reliability authorities to maintain reliable and affordable electricity.
- This includes partnerships with other federal agencies, grid operators and power companies to issue environmental regulations that achieve the dual imperatives of climate and public health protection and support for a reliable and resilient grid. For example, EPA has been and will continue to work closely with the Federal Energy Regulatory Commission (FERC) on reliability aspects of this final rule.
- Over decades EPA regulations like the Mercury and Air Toxics Standards and Good Neighbor Rule have achieved important reductions in pollution from electricity generation while supporting reliability. This rule will do the same.

Addressing Reliability Concerns

- **Rule Adjustments.** Rule adjustments include a simplified subcategory structure that continues to allow power companies with a significant degree of optionality with respect to investments in new generation and operation of existing generation; longer compliance timeframes for coal-fired units installing CCS; and revisions to the standards for new gas-fired combustion turbines to ensure the final standards are achievable for units across a range of utilization patterns. .
- **RULOF.** The final rule articulates a pathway for states to examine state-specific reliability conditions under RULOF for both state plans and state plan revisions.
- **Compliance Flexibilities.** Compliance flexibilities that can also be used to address reliability related issues include the ability for states to use emissions averaging, trading, and mass-based equivalence, in certain situations that respect the environmental integrity of the rule. Moreover, up to a 1-year compliance extension is available to new and existing sources installing control technologies if they meet with unanticipated delays outside of their control, like permit delays.
- **Reliability Mechanisms.** In addition to all of these features, the final rule includes two optional reliability-related instruments. These two reliability-related instruments provide another layer of flexibility further ensuring that implementation of these final rules will not interfere with grid operators' ability to maintain a reliable system.
 - One instrument is a short-term reliability mechanism that is available for both new and existing units. This short-term mechanism is designed to provide additional flexibility through an alternative compliance standard that can be used during annual compliance calculations for the hours sources were needed to address grid emergencies, when reliability might be threatened. These emergencies are most often associated with extreme weather events where electric demand increases and there are often unexpected transmission and generation outages. Existing sources

can access this mechanism in states that choose to include it in their state plans. New sources have access to this short term reliability mechanism that allows them to use alternative standards for compliance and applicability calculations when units are responding to grid emergencies by providing requisite documentation at the end of the annual compliance period.

- A second instrument is a reliability assurance mechanism that will be available for existing units that intend to cease operating, but, for unforeseen reasons, need to temporarily remain online (for up to one year beyond the planned cease operation date) to support reliability. The reliability assurance mechanism requires an adequate showing of reliability need. EPA will seek the advice of FERC for extensions exceeding six months. The reliability assurance mechanism is intended for circumstances where there is insufficient time to complete a state plan revision, and can only be used by sources in states that choose to include the mechanism in their state plans.

Engagement

- As states develop plans for existing steam electric generating units, engagement with relevant reliability authorities will be important in advancing smooth implementation of these rules. The EPA strongly recommends that states reach out to all relevant reliability authorities in their jurisdictions as part of their required Meaningful Engagement under this final rule.
- EPA engaged with multiple stakeholders on reliability issues, including balancing authorities that submitted comments, state regulators, the Federal Energy Regulatory Commission (FERC) Commissioners as well as technical staff, the Department of Energy (DOE), the National Electric Reliability Corporation (NERC), and other expert groups.
- EPA and DOE signed a [Memorandum of Understanding](#) to support grid reliability and resiliency at every stage as the agency advances efforts to reduce pollution, protect public health, and deliver environmental and economic benefits for all. EPA intends to continue working with DOE to ensure that reliability stakeholders have ongoing opportunities to engage EPA. In November 2023, EPA participated in FERC's Annual Reliability Technical Conference, and met with many balancing authorities and others interested in reliability issues at that forum.
- In addition to the input received by various stakeholders, EPA developed an analysis of the resource adequacy implications of this rule. This analysis indicates that the rule can be implemented without adverse consequences. This analysis is included in the docket and available on the rule website.
 - EPA also performed a sensitivity analysis of the combined effect of the carbon pollution standards, toxics, and water rules, as well as the vehicle rules on the power sector. The sensitivity's projections regarding changes in electricity supply and

demand align with recent peer-reviewed research and reports from DOE and NREL in showing that the sector can meet growing demand for electricity and provide reliable, affordable electricity at the same time as it reduces pollution to protect health and the planet. EPA conducted a specific sensitivity run for the rule using high load growth assumptions and further demonstrated that the rule will not interfere with grid operator's ability to ensure electric reliability.

This analysis is included in the docket and available on the rule website. For More Information

- Interested parties can download a copy of the final rule from [Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants](#)