

EPA's Unworkable Power Plant Proposal Threatens Electric Reliability and Affordability

Key Findings

- In May 2023, EPA proposed new rules for coal and natural gas-fired power plants.
- EPA's proposal mandates inadequately demonstrated technologies and unachievable emissions limits on an unworkable timeframe in violation of the law and Supreme Court decisions.
- EPA should withdraw this proposal in its entirety. It will jeopardize affordable and reliable electricity by forcing the premature closure of always available power plants while also making it harder to permit, site, and build critical new power plants.

Power Plant Proposal Background and Overview

On May 23, 2023, the Environmental Protection Agency (EPA) proposed rules to limit greenhouse gas (GHG) emissions from new and existing coal and natural gas power plants. Starting in 2030, the proposal requires increasingly stringent CO_2 emissions controls at coal and natural gas power plants, unless they shut down or curtail their operations. Requirements would vary based on the type of unit, how frequently it operates, and how long it will operate after certain dates.

New gas combustion unit requirements (applicable to units that start construction after May 22, 2023) are based on capacity factor. New "baseload" gas units must significantly co-fire with clean hydrogen (30% by 2032 and 96% by 2038) or implement carbon capture and storage (CCS) (90% capture by 2035). New "intermediate load" units must co-fire with 30% clean hydrogen by 2032. New "low load/peaking" units may operate without additional emissions controls if they use lower emitting fuels.

Existing coal unit requirements are based on expected retirement date. Units planning to operate in 2040 and beyond must meet a CCS standard of 90% capture by 2030. Units retiring before 2040, 2035, and 2032 face a gradient of less stringent, but difficult, measures that must also be met by 2030. Of note, units retiring before 2040 face the steep hurdle of co-firing with natural gas at a 40% rate beginning in 2030, unless the conditions to retire before 2032 or 2035 are met.

In February 2024, EPA announced it intends to remove *existing* natural gas power plants from the current rule and instead pursue a separate rulemaking that may have even greater impacts on reliable electricity. While the rules are not yet final, EPA's proposal for existing coal and new natural gas units nevertheless remains unlawful, unachievable and unfixable. As discussed here, EPA must follow the law and set standards based on technologies that have been adequately demonstrated and are achievable.

Co-ops are being smart and strategic as they work towards a responsible energy future. From deploying microgrids and renewables to launching demand response programs, electric cooperatives take an innovative and diverse approach to reliably keep the lights on today and tomorrow. But EPA's expectation that the industry can generate more electricity with fewer resources over an unrealistic timeline is not a serious or practical approach.

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Disregards the Law and Supreme Court Decisions

EPA's proposal is inconsistent with the text, structure, and context of the Clean Air Act and violates the law. EPA's proposal exceeds the agency's authority by asserting vast new authority of major economic and political significance without a clear statement from Congress. This disregards Supreme Court direction and precedent, notably the "major questions doctrine" and *West Virginia v. EPA*. Under the CAA, emission standards must be: "adequately demonstrated", achievable nationwide, and cost-effective. As detailed here, EPA's proposal does not meet the CAA's requirements.

Requires the Use of Inadequately Demonstrated Technologies

While CCS and hydrogen are both promising technologies, they are not yet widespread or commercially available and have not been "adequately demonstrated" as is required. There are no units in the country currently meeting what EPA proposes with either technology. Requirements for some coal units to co-fire natural gas are similarly flawed. Electric co-ops are national leaders in the testing and development of carbon capture. Because of that leadership, co-ops understand the complex challenges associated with making CCS work at every power plant required by EPA. CCS has not been shown to consistently achieve a 90% capture rate, as proposed by EPA, while units operate at baseload levels. Clean hydrogen co-firing at the rates EPA proposes will also require significant technological advances. EPA has even faced questions from within the Administration about the viability of these technologies.

Mandates Unrealistic and Unworkable Timelines

There is insufficient infrastructure in place, especially massive pipeline networks, to support CCS and clean hydrogen, even assuming the technologies work as EPA envisions. The required infrastructure cannot reasonably be expected to be in place in time to meet EPA's proposed requirements. This is due to significant cost and financing requirements, supply chain challenges, permitting hurdles, land ownership and access concerns, expected public opposition, and other factors. In October 2023, two major CO₂ pipeline projects EPA cites in its proposal were sidelined: Navigator CO₂ Ventures canceled its 1,302-mile pipeline and Summit Carbon Solutions postponed construction on its 2,067-mile pipeline until 2026. These setbacks undermine EPA's already spurious projections for the readiness of CCS as an adequately demonstrated and achievable technology, which is required for its proposed rule.

Jeopardizes Reliability and Affordability

EPA's proposed CCS and hydrogen requirements and timelines endanger new natural gas plants and all but ensure coal units will opt to shut down by 2035. This will reduce key generating resources, magnifying today's reliability challenges with grave consequences for an already stressed electric grid. All of this will occur while the demand for electricity skyrockets as we electrify more of the American economy. The proposal will simultaneously increase costs for consumers throughout rural America. EPA is overly optimistic about how federal energy incentives may transform the electric sector and underestimates the proposal's costs significantly.

EPA should withdraw this proposal, which will jeopardize reliability and result in more blackouts, higher costs, and greater uncertainty for American families and businesses.

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