

EPA Power Plant Rule

Fifth in a series

The North American Electric Reliability Corp. has found that energy policy is now among the top threats to reliable and affordable power. In April, the Environmental Protection Agency finalized its new power plant rule that rapidly curtails carbon dioxide emission from coal and gas plants. The rule is sure to lead to plant closures, higher power prices and significant reliability challenges as demand for electricity skyrockets in the coming years. Here are the key facets of the EPA rule and their likely impacts.

What's in the Rule?



- EPA relies on the Clean Air Act for its authority to regulate CO₂.
- Existing coal plants that plan to operate after 2038 and new baseload gas plants must reach 90% carbon capture and storage by 2032.
- Coal units retiring before 2039 must co-fire with 40% natural gas beginning in 2030.
- Coal units retiring before 2032 need no new emissions controls.
- EPA deferred finalizing guidelines for existing baseload gas units.
- New peaking gas units must drastically limit operations.
- States must file implementation plans with EPA by June 2026.

Compliance Costs



CCS: Adding carbon capture and storage would cost at least \$1 billion per plant and is currently untested at scale.

CO₂ pipeline: An estimated 65,000 miles of new pipeline would be needed to move CO₂ to where it can be stored to meet net-zero goals; only ~5,000 miles currently exist in the U.S.

Transmission: Some estimates say U.S. transmission capacity will need to grow two to five times from current levels by 2050.

New generation: A sharp increase in intermittent wind and solar and declines in always-on coal and gas generation are expected.

Hydrogen: New gas units can meet emissions requirements by co-firing hydrogen, but it is an unproven technology.



What Are the Impacts?



- Premature retirement of coal and gas plants will hurt reliability, particularly during peaks.
- Shifting generation to intermittent renewables will complicate resource planning and hurt reliability.
- Supply shortfalls are likely as demand for firm power skyrockets and peak U.S. load is expected to jump by around 38 GW in the next four years.

Legal Challenges



NRECA, states and others are suing EPA, saying the rule:

- Violates the Clean Air Act because EPA asserts vast new authority of major economic and political significance without a clear statement from Congress, going against the Supreme Court's ruling in *West Virginia v. EPA*.
- Requires the use of inadequately demonstrated technology, including 90% carbon capture.
- Mandates unrealistic and unachievable timelines.
- Includes compliance options that unlawfully require generation-shifting.