

EPA's Unnecessary and Costly Mercury and Air Rule

Key Findings

- EPA's final Mercury and Air Rule will require some coal plants to install expensive emissions control technologies to significantly reduce mercury and filterable particulate matter. On March 12, 2025, EPA announced reconsideration of this rule and outlined a process for certain plants to receive a 2-year compliance exemption.
- Emissions of mercury and particulate matter have declined more than 80 percent since 2012 as utilities have invested heavily in state-of-the-art emissions control technologies to come into compliance with already stringent regulations. As a result, EPA has found that any health risks that remain are at an acceptable level.
- The rule will lead to a costly mandate with no appreciable health benefits and the premature retirement of some coal-fired units that underpin reliable electricity.

Background

The Clean Air Act contains provisions to address mercury and other specific air pollutants from electric generating units, particularly coal-fired power plants. The Environmental Protection Agency (EPA) must first determine that it is “appropriate and necessary” to regulate those pollutants from those power plants before issuing control technology requirements. After initial requirements are set, EPA is directed to analyze any residual risks that remain and revise those requirements, if necessary, every eight years through a “risk and technology review” (RTR).

In 2012, EPA reaffirmed an earlier “appropriate and necessary” finding and issued the Mercury and Air Toxics Standards (MATS) Rule, sweeping regulations for mercury and filterable particulate matter (fPM) emissions from coal- and oil-fired power plants. With only a three-year compliance period, any unit that was not able to quickly and cost-effectively retrofit with costly emission control technologies (ex: fabric filters or “baghouses”) or switch fuels was forced to shut down. In 2020, EPA published the results of its required eight-year RTR for the 2012 standards and determined that 1.) remaining risks from emissions were acceptable and 2.) there were no cost-effective controls to achieve further emissions reductions.

In April of 2024, however, EPA finalized its Mercury and Air Rule that revised that 2020 MATS RTR determination. The emissions regulated under the 2012 MATS rule have declined more than 80 percent since that rule was issued. As a result of that compliance, EPA has found that any health risks that remain are at an acceptable level. Despite this finding and though it has identified no new cost-effective controls, EPA has set stringent emissions limits solely because *some* units had lower emission rates than others. It has erroneously assumed all units can achieve those rates and will require full compliance by the summer of 2027.

NRECA, several generation and transmission cooperatives, other industry groups, and a 23-state coalition led by the State of North Dakota have filed lawsuits challenging the final rule and litigation is ongoing. On March 12, 2025, EPA announced it will be reconsidering the Mercury and Air Rule. At this time, however, the rule remains in effect. In doing so, EPA invited plants covered by the rule to submit a request for a 2-year exemption if the President determines the compliance technology is not available and the plant serves the national security interest.

Concerns with the Final Mercury and Air Rule

Lignite Coal Units: EPA's 2012 rule set a separate standard for mercury emissions for coal units that use lignite coal, appropriately recognizing lignite's unique characteristics and emission control limitations compared to units that use other types of coal. EPA's final Mercury and Air Rule eliminates this distinction. As a result, EPA sets unattainable emissions standards for lignite units, drastically lowering their standards by 70%. Due to the variability of mercury content, lignite units will need to achieve a level of reduction that has not been shown to be achievable.

Particulate Matter: EPA's flawed fPM standard is based on best-case scenarios, rather than real world operations. As a result, EPA's new rule will also significantly reduce the fPM standard that covered plants must meet by 67%. EPA has arbitrarily omitted most of its available data on emissions and chosen only the best performing results for each unit. This approach fails to account for long term variability that is affected by changes in fuel and process conditions, among other operational variables.

EPA compounds the error by failing to account for a compliance margin, a change from previous EPA rules. A compliance margin is the amount by which sources must outperform an emissions standard in order to ensure compliance. Units typically need to operate around 20-30 percent below any required standard to ensure that operational variability does not lead to emissions over the standard. By not accounting for this compliance margin here, EPA underestimates the number of units that will have to take measures to comply, thus underestimating the costs to the sector by about 50 percent.

Monitoring Systems: While the 2012 rule gave operators the flexibility of using quarterly stack testing or costly Continuous Emissions Monitoring Systems (CEMS) to demonstrate compliance with fPM standards, EPA's final Mercury and Air Rule inappropriately requires the use of CEMS and eliminates stack testing. However, EPA's standard for fPM is set at levels that CEMS struggles to accurately measure. Further, EPA's cost estimates for CEMS are too low, and its estimates for stack testing are too high, meaning that EPA assumes CEMS is a more cost-effective option when it is not.

EPA's Mercury and Air Rule Will Lead to Unnecessary Retirements

Cost-effective federal regulations that minimize unnecessary burdens are essential to cooperatives' ability to meet their mission. EPA's Mercury and Air Rule is not cost effective and is unduly burdensome. The final rule will lead to a costly mandate with no appreciable health benefits and the premature retirement of some coal-fired units that underpin reliable electricity.

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