

# EPA's Aggressive Ozone Transport Rule Threatens Grid Reliability and Electrification Efforts

# **Key Findings**

- The Environmental Protection Agency (EPA) in March 2023 released a final regulation, known as the "Transport Rule," that requires deep nitrogen oxide (NOx) reductions during summer ozone season from power plants in 22 states under the auspices of meeting Clean Air Act "good neighbor" obligations for ozone pollution. The final rule was officially published in June and is effective August 4, 2023.
- While EPA incorporated some changes recommended by NRECA, the final rule imposes aggressive emission reduction requirements under a stringent trading regime, causing co-ops to be faced with the decision to prematurely retire significant amounts of baseload coal capacity or install expensive NOx controls. This would increase costs to electric consumers and heighten electric reliability concerns.
- Multiple courts have already questioned EPA's process for issuing this rule, staying EPA's denial of certain ozone transport "good neighbor" state implementation plans and effectively providing temporary relief from compliance with the federal rule.
- EPA opted not to include any reliability safety value mechanism or force majeure to provide utilities with relief during grid emergency circumstances.

### **Background on EPA Ozone Regulations**

Under the Clean Air Act (CAA), EPA is required to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants, including ozone, which is created by emissions of nitrogen oxides (NOx) and volatile organic compounds. EPA is required to reevaluate NAAQS standards every five years. In its 2020 review, EPA elected to retain the 2015 Ozone NAAQS Standard.

The Clean Air Act "good neighbor" provision requires states to reduce pollutants from their sources that are causing or contributing to "downwind" state attainment with the 2015 Ozone NAAQS. These "upwind" states must submit state implementation plans for EPA review and approval that address good neighbor obligations. EPA may issue a federal implementation plan if it views a state's plan as insufficient to meet its good neighbor obligations.

### **EPA Ozone Good Neighbor Transport Rule**

In March 2023, EPA finalized a Transport Rule that sets federally mandated NOx reductions for power plants in 22 states. EPA's proposal would impose unprecedented NOx reductions on the electric sector starting the summer of 2023. By 2026, the rule would effectively require the shutdown of any coal-fired power plant with greater than 100-megawatt capacity that has not installed the most expensive, state-of-the-art NOx pollution controls.

Contrary to previous NOx ozone season rules, the Transport Rule affords little leeway for everyday electricity generation needs and lacks important program flexibility in the emissions trading program used

for compliance. The rule hampers the ability of existing fossil fuel generation to meet increasing electricity demand by relying on electric generation levels from 2021 and forcing stepwise NOx reductions in state NO<sub>X</sub> emissions budgets from 2023 through 2030. This 2021 statewide cap and limitations on how states may "bank" NOx allowance credits creates significant uncertainty for states and utilities, particularly since they do not account for any industrial growth, particularly transportation and other sector electrification. Taken together, these changes are projected to result in critical shortfalls in NOx trading program allowances necessary to allow vital coal units to operate.

Ozone transport state implementation plans are the subject of challenge by states and affected sources in numerous U.S. circuit courts. Recognizing the likelihood of success of these challenges, and the irreparable harm that could occur to the electric grid and to cooperative federalism, these courts have temporarily stayed EPA's state plan denials for six states – Arkansas, Kentucky, Louisiana, Mississippi, Missouri, and Texas – blocking for now implementation of the federal rule in those states.

## Adverse Impact on Grid Reliability and Electrification Efforts

Electric cooperatives have substantially lowered emissions of sulfur dioxide, nitrogen oxides and carbon since 2005 and are driving innovation across the electric sector. Co-ops have installed selective non-catalytic reduction NOx emission controls, more expensive selective catalytic reduction controls, or have changed the combustion processes to reduce NOx emissions of power plants.

The results of these advancements have been significant. From 2005 to 2021, electric co-ops reduced total NOx emissions by nearly 70% and the electric generation sector now accounts for only about 9% of the nation's NOx emissions.<sup>1</sup> As a result, mobile sources of NOx emissions were nearly five times those of the electric power sector in 2020, according to EPA.

Of particular concern, the Transport Rule would require costly controls leading to premature unit retirements or severely limited operation during summer ozone season of 62 coal-fired generation units, totaling 32 gigawatts of capacity, by the 2026-2027 timeframe. This feat would require more power sector NOx control retrofits (by megawatt) than have *ever* been achieved in any two-year period.

Providing affordable, reliable electricity for families and business is a cornerstone of the American economy. And as the nation leans on electricity to power more of our economy, regulations like this accelerate the likelihood that the cost of electricity will increase even as grid reliability diminishes. Spurred by policy and market factors, the ongoing energy transition has prioritized premature baseload plant closures without considering the collective impact on the electric grid and the availability of feasible technology to fully replace them. That's proving to be a dangerous misstep that would be accelerated by EPA's Transport Rule.

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<sup>&</sup>lt;sup>1</sup> U.S. Environmental Protection Agency 2020 National Emissions Inventory (NEI) Data. https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries