

## Cross State Air Pollution Rule

### Market Status

On March 15, 2023, EPA issued its final Good Neighbor Plan (“GNP”) which revises the Cross-State Air Pollution Rule <https://www.epa.gov/csapr/good-neighbor-plan-2015-ozone-naaqs#history>. The rule was published in the Federal Register on June 5, 2023, and became effective on August 4. The rule is part of an overall “good neighbor” plan proposed by the EPA to help reduce smog across the US. Starting in 2023, the proposed rule aimed to expand the Group 3 Ozone NOx Season from 12 states to 22 states.

| Term         | Bid    | Offer  |
|--------------|--------|--------|
| SNOx Group 1 | \$600  | \$900  |
| SNOx Group 2 | \$600  | \$900  |
| SNOx Group 3 | \$2500 | \$3500 |

| CSAPR<br>Original<br>G3 States   | Good<br>Neighbor<br>Plan<br>G3 States  | CSAPR<br>G2<br>States |
|--|--|-----------------------|
| MD<br>NJ<br>NY<br>VA<br>PA<br>MI<br>IL<br>IN<br>OH<br>KY <i>Stay</i><br>LA <i>Stay</i><br>WV <i>Stay</i> | AL <i>Stay</i><br>AR <i>Stay</i><br>MN <i>Stay</i><br>MS <i>Stay</i><br>MO <i>Stay</i><br>NV <i>Stay</i><br>OK <i>Stay</i><br>TX <i>Stay</i><br>UT <i>Stay</i><br>WI<br>WY <i>Stay</i> | KS<br>IA<br>TN        |

The Good Neighbor Plan rule aimed to move seven states that are currently in Group 2 to Group 3 and add three new states that are currently not covered by CSAPR, expanding the Group 3 CSAPR market from 12 states to 22 states. Only three remaining states would be in the existing Group 2.

However, multiple states were granted judicial stays by the courts due to EPA’s SIP disapproval action. In compliance with the court’s decision, the rule stays the effectiveness of the GNP for those states granted stays. As you can see from the table on the left, most GNP states received stays from the court except WI, KY, LA and WV which were in the original Group 3 states and also received a stay. GNP states that received stays revert back to Group 2, and KY, LA, and WV now have their own Group 2 Expanded State category and are not allowed to trade with the existing Group 2 states. The EPA has not provided much guidance during this time, causing regulatory uncertainty that has led to declines in CSAPR prices and liquidity over the last few months. Prices have also declined due to much lower natural gas prices this year compared to last year, resulting in lower emissions. While comparing May and June emissions data from existing Group 3 states, emissions are down over 30% in 2023 compared to 2022. Emissions data from July to September is not currently available.

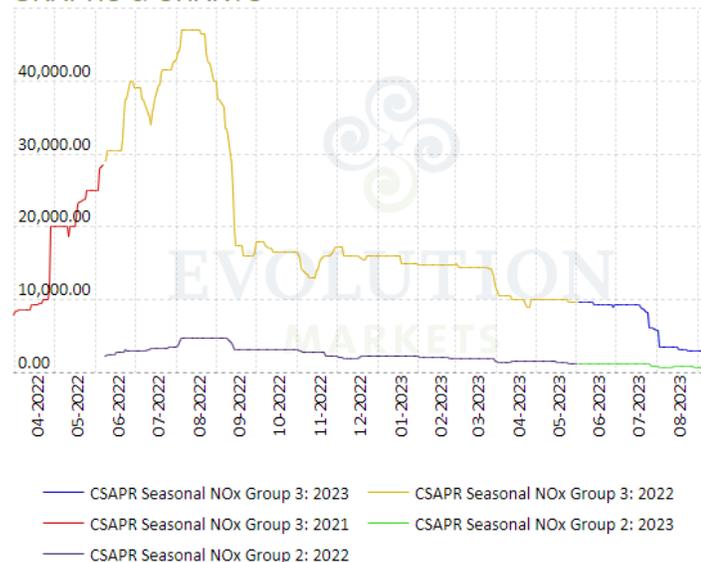
Recently, the Midwest has experienced several long heatwaves during July and August, so it’s possible that state emissions may increase during these months. However, it is likely that the current Group 3 states’ total ozone emissions will be lower than last year, adding to a Group 3 bank that already exists. Comparing May and June 2023 emissions data for existing Group 2 states, emissions are down only 10%, but much of the heat came in July and August, for which data from emissions is not yet available. Since many of the

Group 2 states are under a stay from the GNP, many facilities may decide to hold on to any Group 2 excess in case they get pulled back into Group 3 once the EPA files their GNP plan with the courts. This has caused decreased liquidity for trading of Group 2 allowances, resulting in choppy and higher prices than expected.

## Market Pricing

CSAPR G3 prices peaked close to \$50k per ton in July of 2022 and have fallen steadily since. After the 2022 ozone season ended, prices hovered around \$15k. They then dropped below \$10k once the 2023 ozone season started in May. This drop was due to low natural gas prices coupled with a cool May and June, resulting in decreased emissions and low demand for allowances. CSAPR G2 prices also peaked in July of 2022 at around \$5k and followed the same downward price trend

### GRAPHS & CHARTS



as G3. G2 prices tend to follow where G3 prices are divided by the conversion ratio the EPA has stated in the GNP proposed rule, which was 6.5. However, with the regulatory uncertainty of the GNP and the illiquidity of the G2 Market, prices of G2 seemed to no longer follow that rule in the short term.

Looking forward, predicting future prices is challenging due to the regulatory uncertainty of the GNP, how the EPA will respond to the Judicial Stay, and how the courts will handle each state's case. It is also unclear if this can be resolved by the 2024 ozone season. During times of regulatory uncertainty, affected facilities tend to only buy allowances as needed for the current year. If the 2023 ozone season emissions are down, prices and trading volumes are likely to stay low. It is possible the extended heatwave this summer may cause some demand at the end of the ozone season, but that remains to be seen.

EPA also plans to limit surplus allowances using a target 21% each year starting in 2024- 2029, and then 10.5% for control periods 2030 and later, where the Group 3 bank would be recalibrated to the target level of the sum of state emission budgets for the current control period. Starting in 2026, the EPA allocations get reduced to further reduce emission reductions and to incorporate known retirements. The EPA also plans to incorporate "dynamic budgeting" to account for changes in operation etc., as part of their allocation process and include industrial stationary sources from natural gas transportation, cement production, steel and glass production.

## Future

Prices for the remainder of the 2023 Ozone NOx season are likely to stay flat or turn bearish due to multiple state judicial stays to EPA's GNP. This is coupled with low natural gas prices, which have kept emissions down despite a warm end to the summer. In fact, it has been reported that this summer was the warmest on record. Therefore, we might see some demand come in after all emissions are reported. On September 5, the EPA allocated the vintage 2023 and 2024 allowances to G3 affected utilities, allowing buyers to hedge out to 2024 if they choose to do so.

The regulatory uncertainty regarding the future of the GNP and how the Courts will rule on the EPA SIP disapproval will be a drag on the market for the foreseeable future. This regulatory uncertainty causes affected units to buy only as needed during the current ozone season, leading to price volatility. Prices tend to rise in summers of high electricity demand and high natural gas prices, while they fall in summers of low natural gas prices and cooler weather.