

Item 6.1: ERCOT Analysis of Environmental Protection Agency (EPA) Federal Implementation Plan (FIP) Regional Ozone Transport Rule

Woody Rickerson Vice President of System Planning and Weatherization

Board of Directors Meeting

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Cross-State Air Pollution Rule (CSAPR) Federal Implementation Plan (FIP)

The EPA proposes that emission reductions for 26 states, including Texas, are necessary to address upwind states' interstate transport obligations. Under the proposed rule, the FIP would establish nitrogen oxides (NOx) emissions budgets beginning in ozone season (May 1- September 30) 2023 for Electric Generating Units sources.

ERCOT has performed a preliminary analysis of the potential effect the adoption of this rule would have on the ERCOT grid in 2026. The analysis assumed the retirement of 10,803 MW (installed capacity) of thermal generation, which included 8,203 MW of coal-fired generation at 7 locations, and 2,600 MW of gas-fired generation at 4 locations.

The analysis included the addition of future generation (20,035 MW, only 4% representing thermal generation) that currently meets ERCOT Planning Guide Section 6.9 requirements but did not consider any generation that might be built as a direct result of the loss of the 10,803 MW leaving the market.

In this preliminary analysis, ERCOT looked at four areas of concern for maintaining reliability.

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The results of the preliminary analysis in 2026 include:

- Steady-State Transmission Analysis showed significant impacts to the reliability of the transmission system resulting in \$1.2 to \$1.5 billion to resolve the local reliability issues. The study did not include ERCOT wide regional analysis, however based on the recent studies, there could be an accelerated need for an additional \$2.7 to \$5.2 billion of transmission improvements to improve the ERCOT regional transfer capability after the retirement of the CSAPR-affected generation.
- 2. If the CSAPR-affected generation is retired, the probability of load shed for summer 2026 increases by almost nine times at 8pm when solar generation becomes unavailable.
- 3. The ERCOT Outage Approval process will only be able to approve approximately 1/3 of the expected maintenance outages required by the remaining thermal units in 2026 after the removal of the CSAPR-affected generation.
- 4. The loss of the CSAPR-affected generation will reduce the gross inertia capacity of the system by 13%. This will likely result in increased out of market instruction by ERCOT to maintain minimum amounts of inertia needed to maintain reliability.

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Generation Removed from Service in 2026 for ERCOT Analysis

| | | | | | | INSTALLED CAPACITY RATING | SUMMER CAPACITY |
|-----------------------------------|--------------------------------|--------------------|--------------|----------------|--------------|---------------------------------|--------------------|
| | UNIT CODE | COUNTY | FUEL | ZONE | IN SERVICE | (MW) | (MW) |
| COLETO CREEK | COLETO_COLETOG1 | | COAL | SOUTH | 1980 | 650.0 | 655.0 |
| FAYETTE POWER U1 FAYETTE POWER U2 | FPPYD1_FPP_G1 FPPYD1_FPP_G2 | FAYETTE FAYETTE | COAL COAL | SOUTH SOUTH | 1979 1980 | 615.0 615.0 | 604.0 599.0 |
| FAYETTE POWER U3 | FPPYD2 FPP G3 | FAYETTE | COAL | SOUTH | 1988 | 460.0 | 437.0 |
| J K SPRUCE U1 | CALAVERS JKS1 | BEXAR | COAL | SOUTH | 1992 | 555.0 | 560.0 |
| LIMESTONE U1 | LEG_LEG_G1 | LIMESTONE | COAL | NORTH | 1985 | 893.0 | 824.0 |
| LIMESTONE U2 | LEG_LEG_G2 | LIMESTONE | COAL | NORTH | 1986 | 956.8 | 836.0 |
| MARTIN LAKE U1 | MLSES_UNIT1 | RUSK | COAL | NORTH | 1977 | 893.0 | 800.0 |
| MARTIN LAKE U2 | MLSES_UNIT2 | RUSK | COAL | NORTH | 1978 | 893.0 | 805.0 |
| MARTIN LAKE U3 | MLSES_UNIT3 | RUSK | COAL | NORTH | 1979 | 893.0 | 805.0 |
| SAN MIGUEL U1 | SANMIGL_G1 | ATASCOSA | COAL | SOUTH | 1982 | 430.0 | 391.0 |
| TWIN OAKS U1 | TNP_ONE_TNP_O_1 | ROBERTSON | COAL | NORTH | 1990 | 174.6 | 155.0 |
| TWIN OAKS U2 | TNP_ONE_TNP_O_2 | ROBERTSON | COAL | NORTH | 1991 | 174.6 | 155.0 |
| GRAHAM STG 2 | GRSES_UNIT2 | YOUNG | GAS-ST | WEST | 1969 | 387.0 | 390.0 |
| GREENS BAYOU CTG 73 | GBY_GBYGT73 | HARRIS | GAS-GT | HOUSTON | 1976 | 72.0 | 56.0 |
| GREENS BAYOU CTG 74 | GBY_GBYGT74 | HARRIS | GAS-GT | HOUSTON | 1976 | 72.0 | 56.0 |
| GREENS BAYOU CTG 81 | GBY_GBYGT81 | HARRIS | GAS-GT | HOUSTON | 1976 | 72.0 | 56.0 |
| GREENS BAYOU CTG 82 | GBY_GBYGT82 | HARRIS | GAS-GT | HOUSTON | 1976 | 72.0 | 50.0 |
| GREENS BAYOU CTG 83 | GBY_GBYGT83 | HARRIS | GAS-GT | HOUSTON | 1976 | 72.0 | 56.0 |
| GREENS BAYOU CTG 84 | GBY_GBYGT84 | HARRIS | GAS-GT | HOUSTON | 1976 | 72.0 | 56.0 |
| T H WHARTON POWER CTG 51 | THW_THWGT51 | HARRIS | GAS-GT | HOUSTON | 1975 | 85.0 | 56.0 |
| T H WHARTON POWER CTG 52 | THW_THWGT52 | HARRIS | GAS-GT | HOUSTON | 1975 | 85.0 | 56.0 |
| T H WHARTON POWER CTG 53 | THW_THWGT53 | HARRIS | GAS-GT | HOUSTON | 1975 | 85.0 | 56.0 |
| T H WHARTON POWER CTG 54 | THW_THWGT54 | HARRIS | GAS-GT | HOUSTON | 1975 | 85.0 | 56.0 |
| T H WHARTON POWER CTG 55 | THW_THWGT55 | HARRIS | GAS-GT | HOUSTON | 1975 | 85.0 | 56.0 |
| T H WHARTON POWER CTG 56 | THW THWGT56 | HARRIS | GAS-GT | HOUSTON | 1975 | 85.0 | 56.0 |
| W A PARISH CTG 1 | WAP_WAPGT_1 | FORT BEND | GAS-GT | HOUSTON | 1967 | 16.3 | 13.0 |
| W A PARISH STG 1 | WAP_WAP_G1 | FORT BEND | GAS-ST | HOUSTON | 1958 | 187.9 | 169.0 |
| W A PARISH STG 2 | WAP_WAP_G2 | FORT BEND | GAS-ST | HOUSTON | 1958 | 187.9 | 169.0 |
| W A PARISH STG 3 | WAP_WAP_G3 | FORT BEND | GAS-ST | HOUSTON | 1961 | 299.2 | 240.0 |
| W A PARISH STG 4 | WAP_WAP_G4 | FORT BEND | GAS-ST | HOUSTON | 1968 | 580.5 | 527.0 |
| | | | | | Totals | 10,803.7 | 9,800.0 |

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