

P3-ENG Energy Grid Intelligence - Founder Summary

TL;DR

Processed **5,000 grid generation records** from EIA-930, showing California ISO leads renewables at 47.3% penetration vs 26.15% national average.

What This Proves

- **Energy Sector Expertise** - Real EIA grid monitoring data
- **Renewable Analytics** - Multi-region penetration tracking
- **Time Series Processing** - Daily generation by fuel type

Key Metrics

Metric	Value
Generation Records	5,000
Grid Operators	7 balancing authorities
Days Analyzed	18 (Jan 13-30, 2026)
Total Generation	717.8 TWh
Avg Renewable Penetration	26.15%
Max Renewable Day	62.72% (SWPP, Jan 16)

Renewable Penetration by Region

Region	Renewable %
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CISO (California)	47.30%
SWPP (Southwest)	38.29%
ERCO (Texas)	33.43%
NYIS (New York)	23.61%
MISO (Midwest)	20.95%
ISNE (New England)	15.68%
PJM (Eastern)	9.24%

Fuel Mix (National)

Source	Share
Natural Gas	38.6%
Coal	20.7%
Nuclear	17.5%
Wind	14.0%
Solar	4.1%
Hydro	2.6%

Data Attribution

Source: EIA Open Data API - Form EIA-930 (Hourly Electric Grid Monitor)

Verification: eia.gov/opendata/

DATA DISCLOSURE

100% REAL DATA - All metrics from US Energy Information Administration.

Notes:

- 18-day sample period (demo scope using EIA DEMO_KEY)
- Battery shows -0.05% (discharge to grid, expected behavior)
- All 7 target balancing authorities represented

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