Pennsylvania

PJM System-Wide Generation Fuel Mix

Power Sources

Sources of electricity for all Direct Energy customers in the reporting period 1/1/2023 - 12/31/2023 was met by generation from the following sources.

Sources of electricity supplied for the 12 months ending 12/31/2023.

Source	Percentage of total
Coal	14.9361
Oil	0.2703
Natural Gas	44.2055
Nuclear	33.6172
Hydro	0.9623
**Biomass*	0.0000
**Captured Methane Gas*	0.3112
**Solar Voltaic*	1.3770
**Solid Waste*	0.4848
**Water*	0.0000
**Wind*	3.5518
**Wood/Wood Waster*	0.1704
Total:	100%
**Renewable Energy Resources Subtotal:*	5.90%

Air Emissions

Carbon dioxide (CO_2), nitrogen oxides (NO_X), and sulfur dioxide (SO_X) emission rates for the PJM Regions.

PJM SYSTEM MIX - Emissions

Emission Type	Lbs. per MWH	Percentage of PJM Regional Average
Carbon Dioxide	732.7929	100%
Nitrogen Oxides	0.2537	100%
Sulfur Dioxide	0.3238	100%

The benchmark emission levels that are shown approximate the emission rate for all electricity generation in the PJM region. Data used to calculate the emission profile came from generator owner-entered values, EPA generator-specific emission factors based on 2004/2005 CEMS data, EPA plant emission factors from eGRID or fuel type default. CO is a “greenhouse gas” which may contribute to global climate change. SO and NOx released into the atmosphere react to form acid rain. Nitrogen Oxides also react to form ground level ozone, an unhealthful component of “smog.”

One hundred percent of the total electricity supplied was purchased from other suppliers and the amount of nuclear waste attributable to producing this electricity is not known and is not included in this table.