

Fuel Mix Report

The environmental characteristics of Cloverland's electricity as required by Public Act 141 of 2000.

COMPARISON OF THE FUEL SOURCES USED TO GENERATE ELECTRICITY

Cloverland vs. regional average for the 12-month period ended 12/31/17.

BY THE NUMBERS

	CLOVERLAND	REGION
COAL	27.5%	48.75%
NUCLEAR	13.6%	26.84%
GAS	8.9%	17.00%
OIL	0.0%	0.41%
HYDROELECTRIC	48.7%	0.90%
BIOMASS	0.0%	0.52%
BIOFUEL	0.0%	0.90%
SOLID WASTE INCINERATION¹	0.0%	< .10%
WIND	1.2%	4.07%
WOOD	0.1%	0.42%
SOLAR	0.0%	< .10%
TOTAL RENEWABLE FUELS	50.0%	7.00%

¹ INCLUDES LANDFILL GAS

AIRBORNE EMISSIONS AND HIGH-LEVEL NUCLEAR WASTE COMPARISON

Cloverland vs. regional average for the 12-month period ended 12/31/17.

A regional average of all generation in Michigan, Illinois, Indiana, Ohio, and Wisconsin (lbs/MWh)

EMISSION TYPE	CLOVERLAND	REGION
Sulfur Dioxide	0.36	3.72
Carbon Dioxide²	1,427	1,999
Oxides of Nitrogen	0.55	1.42
High-level nuclear waste³	None	0.0083

²CARBON DIOXIDE EMISSIONS FOR THE HISTORICAL YEARS 1998-2008 HAVE BEEN REVISED BY EIA DUE TO CHANGES IN EMISSION FACTORS

³HIGH-LEVEL NUCLEAR WASTE IS BASED ON DISCHARGED FUEL FOR A TIME SPAN OF APPROXIMATELY 2 YEARS IN LENGTH ENDING IN 2002.