

Environmental Information Disclosure (EID) for the Electricity Product of Spark Energy, LLC

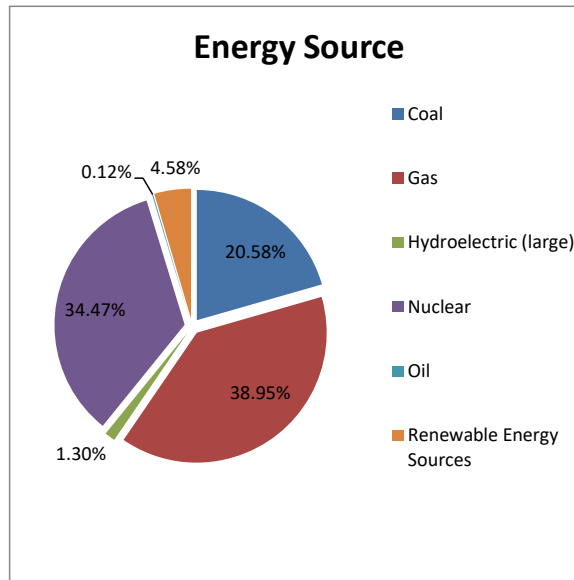
Electricity Supplied from **June 1, 2019 to May 31, 2020**

- Below is an illustrative example of the resources used to generate electricity for Spark Energy, LLC customers.
- The PJM System Mix provided in the standard format below is to be used as the default EID Label when a TPS or EDC has not made an affirmative claim about the environmental characteristics of their product.
- A Third Party Supplier or EDC may substitute product specific information if it makes an affirmative claim that the electricity mix used in its product exceeds the standard default mix including the State mandates for Renewable Portfolio Standard compliance. This label must be submitted to the NJ BPU Office of Clean Energy for verification.
- If a TPS or EDC uses substitute data to substantiate an environmental claim, the EID label must include the TPS or BGS Providers emissions data in lb/MWh for comparison with PJM benchmark as described below.
- If a TPS or EDC uses substitute data to substantiate an environmental claim, the EID label must also include a graphical representation of the TPS or BGS Provider's emissions data as a percentage of PJM benchmark as described below.
- If a TPS or EDC uses substitute data

Energy Source

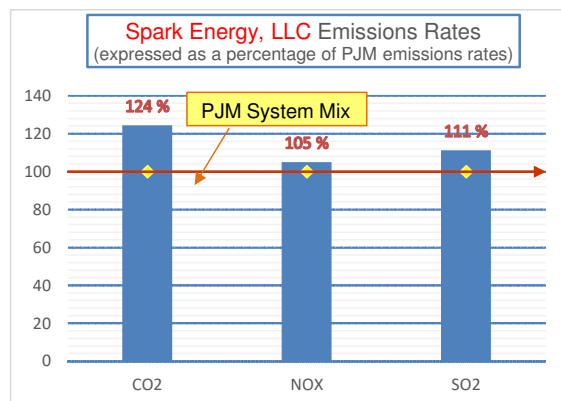
Spark Energy, LLC relied on these energy resources to provide the electricity product.

Coal	20.58%
Gas	38.95%
Hydroelectric (large)	1.30%
Nuclear	34.47%
Oil	0.12%
Renewable Energy Sources	
Captured methane gas	0.33%
Fuel cells	0.03%
Geothermal	0.00%
Hydroelectric (small)	0.00%
Solar	0.39%
Solid waste	0.52%
Wind	3.13%
Wood or other biomass	0.18%
Total:	100.00%
Renewable Energy Sources Subtotal	4.58%



Air Emissions Rates

Pursuant to N.J.A.C. 14:8-3:1(b)2, air emission rates for CO₂, NO_x, and SO₂ associated with the fuel mix must be reported in units of pound per megawatt-hour (lb/MWh). The Benchmark Energy Source and emission rate data is the PJM System Mix for EY 2019 and represent the average amount of air pollution associated with the generation of electricity in the PJM region. The PJM System Mix average emission rate for all electricity generation in the PJM Region can be used for comparison when a NJ TPS or BGS Provider supplies actual emission data for a product making an affirmative environmental claim that exceeds the NJ Renewable Portfolio Standards. CO₂ is a "greenhouse gas" which may contribute to global climate change. NO_x and SO₂ react to form acids found in acid rain. NO_x also reacts to form ground level ozone, an unhealthy component of "smog."



Data Source	CO ₂ (lb/MWh)	NO _x (lb/MWh)	SO ₂ (lb/MWh)
PJM System Mix	803.64	0.38	0.45
Spark Energy, LLC	1000.00	0.40	0.50

	CO ₂	NO _x	SO ₂
% of PJM Emissions	124	105	111
PJM Benchmark (%)	100	100	100