

## Environmental Information Disclosure (EID) for the Electricity Product of Calpine Energy Solutions, LLC

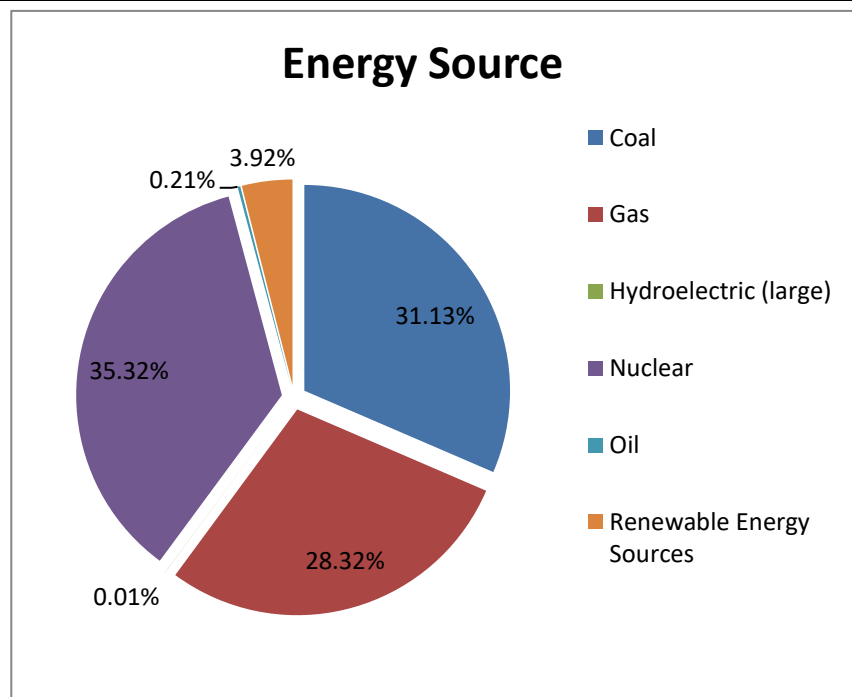
Electricity Supplied from June 1, 2017 to May 31, 2018

1. Below is the default EID Label describing the resources used to generate electricity for customers of Calpine Energy Solutions, LLC
2. The PJM System Mix data 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.
3. 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.
4. If a TPS or EDC uses actual product specific 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.
5. If a TPS or EDC uses actual product specific 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 shown below.
6. If a TPS or EDC uses substitute data to substantiate an environmental claim based upon the retirement of RECs beyond that required by NJ law or actually procured renewable electricity, the EID label with sufficient documentation to determine generation sources and emissions must be submitted to the NJ BPU Office of Clean Energy for verification.

### PJM System Mix

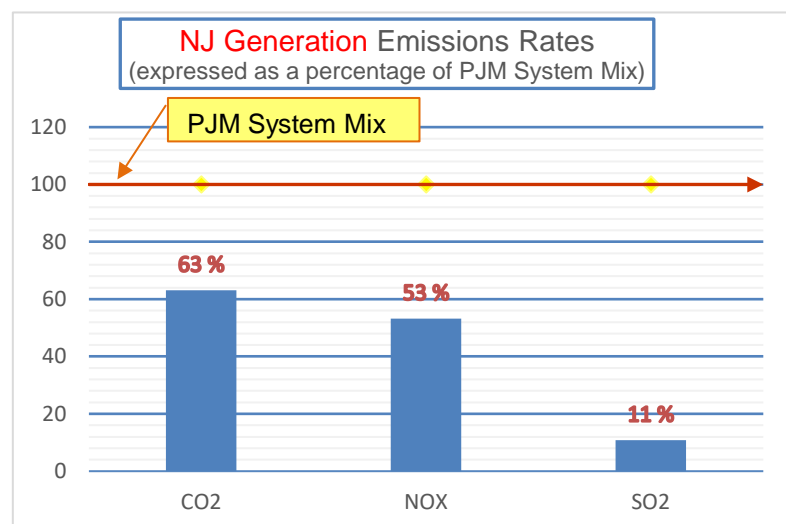
#### Energy Source

Coal	31.13%
Gas	28.32%
Hydroelectric (large)	0.01%
Nuclear	35.32%
Oil	0.21%
Renewable Energy Sources	
Captured methane gas	0.32%
Fuel cells	0.03%
Geothermal	0.00%
Hydroelectric (small)	0.00%
Solar	0.22%
Solid waste	0.48%
Wind	2.65%
Wood or other biomass	0.22%
Total:	100.00%
Renewable Energy Sources Subtotal	3.92%



### Air Emissions Rates

Pursuant to N.J.A.C. 14:8-3:1(b)2, air emission rates for CO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>2</sub> 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 2018 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. CO<sub>2</sub> is a "greenhouse gas" which may contribute to global climate change. NO<sub>x</sub> and SO<sub>2</sub> react to form acids found in acid rain. NO<sub>x</sub> also reacts to form ground level ozone, an unhealthful component of "smog." For illustrative purposes, the chart below compares a hypothetical electricity product that contained 100% NJ generation sources to the PJM System Mix.



Data Source	CO <sub>2</sub> (lb/MWh)	NO <sub>x</sub> (lb/MWh)	SO <sub>2</sub> (lb/MWh)
PJM System Mix	947.59	0.62	0.74
NJ Benchmark	598.00	0.33	0.08

	CO <sub>2</sub>	NO <sub>x</sub>	SO <sub>2</sub>
PJM System Mix (%)	100	100	100
NJ Generation (%)	63	53	11