

January 2021

<p>Power Sources Demand for electricity from all Direct Energy customers in the period of 10/01/2019 - 09/30/2020 was met by generation from the following sources.</p>	<p>NEPOOL System Mix BY Fuel (Contribution to 1mWh of System Mix emissions from each Fuel in lbs/mWh)</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Fuel</th> <th>Fuel %</th> </tr> </thead> <tbody> <tr><td>2020</td><td>Air-source heat pump</td><td>0.08</td></tr> <tr><td>2020</td><td>Biogas</td><td>0.01</td></tr> <tr><td>2020</td><td>Biomass</td><td>2.23</td></tr> <tr><td>2020</td><td>Coal</td><td>0.25</td></tr> <tr><td>2020</td><td>Diesel</td><td>0.58</td></tr> <tr><td>2020</td><td>Digester Gas</td><td>0.10</td></tr> <tr><td>2020</td><td>Efficient Resource (Maine)</td><td>0.11</td></tr> <tr><td>2020</td><td>Energy Storage</td><td>0.03</td></tr> <tr><td>2020</td><td>Fuel Cell</td><td>0.42</td></tr> <tr><td>2020</td><td>Ground and Water-source</td><td>0.07</td></tr> <tr><td>2020</td><td>Hydroelectric/Hydropower</td><td>6.93</td></tr> <tr><td>2020</td><td>Jet</td><td>0.01</td></tr> <tr><td>2020</td><td>Landfill Gas</td><td>0.56</td></tr> <tr><td>2020</td><td>Liquid Biofuels</td><td>0.46</td></tr> <tr><td>2020</td><td>Municipal Solid Waste</td><td>0.66</td></tr> <tr><td>2020</td><td>Natural Gas</td><td>45.11</td></tr> <tr><td>2020</td><td>Nuclear</td><td>25.71</td></tr> <tr><td>2020</td><td>Oil</td><td>5.05</td></tr> <tr><td>2020</td><td>Solar Photovoltaic</td><td>4.48</td></tr> <tr><td>2020</td><td>Solar Thermal</td><td>0.02</td></tr> <tr><td>2020</td><td>Trash-to-Energy</td><td>2.49</td></tr> <tr><td>2020</td><td>Wind</td><td>3.55</td></tr> <tr><td>2020</td><td>Wood</td><td>1.10</td></tr> <tr><td></td><td>Total:</td><td>100.00</td></tr> </tbody> </table>	Year	Fuel	Fuel %	2020	Air-source heat pump	0.08	2020	Biogas	0.01	2020	Biomass	2.23	2020	Coal	0.25	2020	Diesel	0.58	2020	Digester Gas	0.10	2020	Efficient Resource (Maine)	0.11	2020	Energy Storage	0.03	2020	Fuel Cell	0.42	2020	Ground and Water-source	0.07	2020	Hydroelectric/Hydropower	6.93	2020	Jet	0.01	2020	Landfill Gas	0.56	2020	Liquid Biofuels	0.46	2020	Municipal Solid Waste	0.66	2020	Natural Gas	45.11	2020	Nuclear	25.71	2020	Oil	5.05	2020	Solar Photovoltaic	4.48	2020	Solar Thermal	0.02	2020	Trash-to-Energy	2.49	2020	Wind	3.55	2020	Wood	1.10		Total:	100.00
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<p>Air Emissions Carbon dioxide (CO₂), nitrogen oxides (NO_x), and sulfur dioxide (SO_x) emission rates from these sources:</p>	<p>NEPOOL SYSTEM MIX - System Mix (Emission in lbs./mWh)</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Quarter</th> <th>System Mix Average</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>4th</td> <td></td> </tr> <tr> <td></td> <td>Fuel</td> <td></td> </tr> <tr> <td></td> <td>Carbon Dioxide</td> <td>764.43</td> </tr> <tr> <td></td> <td>Carbon Monoxide</td> <td>0.67</td> </tr> <tr> <td></td> <td>Mercury</td> <td>0.00</td> </tr> <tr> <td></td> <td>Nitrogen Oxides</td> <td>0.79</td> </tr> <tr> <td></td> <td>Particulates</td> <td>0.22</td> </tr> <tr> <td></td> <td>Particulates (< 10 microns)</td> <td>0.21</td> </tr> <tr> <td></td> <td>Sulfur Dioxides</td> <td>0.42</td> </tr> <tr> <td></td> <td>Organic Compounds</td> <td>0.04</td> </tr> </tbody> </table>	Year	Quarter	System Mix Average	2020	4th			Fuel			Carbon Dioxide	764.43		Carbon Monoxide	0.67		Mercury	0.00		Nitrogen Oxides	0.79		Particulates	0.22		Particulates (< 10 microns)	0.21		Sulfur Dioxides	0.42		Organic Compounds	0.04																																										
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Notes

- Electricity customers in New England are served by an integrated power grid, not particular generating units. The above information is on generating units under contract to DES in the period 10/01/2019 - 09/30/2020.
- You may also call DES at 1-800-571-4900 or email csdirectenergy@directenergy.com or the Rhode Island Division of Public Utilities and Carrier at 1-401-941-4500

Power Sources:

The electricity you consume comes from the New England power grid, which receives power from a variety of power plants and transmits the power throughout the region as needed to meet the requirements of all customers in New England. When you choose a power supplier, that supplier is responsible for generating and/or purchasing power that is added to the power grid in an amount equivalent to your electricity use. Known Resources include resources that are owned by, or under contract to, the supplier. System Power represents power purchased in the regional electricity market. Biomass refers to power plants that are fueled by wood or other plant matter. Hydro resources of greater than 30 megawatts in size are deemed "large hydro." All other hydro resources are deemed "small hydro." Other Renewables include fuel cells utilizing renewable fuel sources, landfill gas and ocean thermal.

Emissions:

Emissions for each of the following pollutants are presented as a percent of the regional average emission rate. Arrows represent, for each pollutant, the emission rate from a hypothetical new generation facility.

- **Carbon Dioxide (CO₂)** is released when fossil fuels (e.g., coal, oil and natural gas) are burned. Carbon dioxide, a greenhouse gas, is a major contributor to global warming.
- **Nitrogen Oxides (NO_x)** form when fossil fuels and biomass are burned at high temperatures. They contribute to acid rain and ground-level ozone (or smog), and may cause respiratory illness in children with frequent high-level exposure. NO_x also contribute to oxygen deprivation of lakes and coastal waters, which is destructive to fish and other animal life.

Sulfur Dioxide (SO₂) is formed when fuels containing sulfur are burned, primarily coal and oil. Major health effects associated with SO₂ include asthma, respiratory illness and aggravation of existing cardiovascular disease. SO₂ combines with water and oxygen in the atmosphere to form acid rain, which raises the acid level of lakes and streams, and accelerates the decay of buildings and monuments.

