## New Hampshire Electric Cooperative, Inc. Co-op Power Resources Information - 2023

Electric providers are required by the New Hampshire Department of Energy to provide customers with an environmental disclosure label with information to evaluate services offered by competitive suppliers and electric utilities. Further information can be obtained by calling NHEC (800-698-2007), your competitive electric supplier or the NH Department of Energy. Additional information on disclosure labels is available at: www.energy.nh.gov or www.nhec.com.

Link to the NH Department of Energy website: <u>Environmental Disclosure Labels - Frequently Asked Questions | NH Department of Energy</u> <u>https://www.energy.nh.gov/consumers/choosing-energy-supplier/environmental-disclosure-labels-frequently-asked-questions</u>

Power Source	NHEC's Default Service (Co-op Power)			New England System
	Known Resources	Residual Mix	Total	
Geothermal/Other	0.0%	0.0%	0.0%	0.3%
Hydro	3.2%	0.1%	3.3%	12.3%
Nuclear	0.0%	0.0%	0.0%	17.2%
Solar	2.3%	0.6%	2.9%	5.8%
Wind	8.4%	0.0%	8.5%	5.1%
Total Emissions Free	13.9%	0.7%	14.7%	40.7%
Biomass	2.1%	0.0%	2.1%	2.0%
Coal	0.0%	0.3%	0.3%	0.2%
Imported Power	0.0%	13.1%	13.1%	9.7%
Landfill Gas/other	0.0%	0.0%	0.0%	1.2%
Municipal Trash	0.0%	0.2%	0.2%	2.1%
Natural Gas	0.0%	61.2%	61.2%	39.1%
Oil	0.0%	8.5%	8.5%	5.1%
Total	15.97%	84.0%	100.0%	100.0%

Air Emissions	Carbon dioxide (CO <sub>2</sub> ), nitrogen oxide (NO <sub>X</sub> ), and sulfur dioxide (SO <sub>2</sub> ) emission rates from the above sources compared to the total emissions for New England		
	Total NHEC Mix (Lbs/MWh)	NEPOOL System Mix (Lbs/MWh)	
Carbon Dioxide (CO <sub>2</sub> )	782.07	608.95	
Nitrogen Oxide (NO <sub>x</sub> )	0.70	0.52	
Sulfur Dioxide (SO <sub>2</sub> )	0.40	0.28	

## Power Sources:

The electricity consumed in New England is created from a variety of power plants both in and outside the region. When you choose a power supplier, that supplier is responsible for generating and/or purchasing power in an amount equivalent to your electricity use. In the table above, 'Known Resources' include resources that are owned by, or under contract to NHEC. 'Residual Mix' represents power purchased in the regional electricity market, of which some will have had its renewable attributes removed through the sale of Renewable Energy Certificates (RECs) to meet regional Renewable Portfolio Standards (RPSs). NH Electric suppliers are required to obtain a certain amount of RECs in accordance with the state's RPS law RSA 362-F. Suppliers and utilities may offer energy options that contain a higher level of RECs than required by the New Hampshires RPS. Please see http://www.energy.nh.gov for more information on New Hampshire's Renewable Portfolio Standard. 'System Mix' represents all power generated in New England, including power used to meet RPS requirements.

## Emissions:

Please see NH RSA 125-O for annual emission caps.

*Carbon Dioxide* ( $CO_2$ ) is released when fossil fuels (e.g., coal, oil and natural gas) and some solid fuels (e.g. wood and biomass) are burned. CO2, a greenhouse gas, is a major contributor to climate change. The amount of CO2 released by the power sector within New England is capped by the Regional Greenhouse Gas Initiative (RGGI). Please visit RGGI.org for more information.

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 when there is frequent high level exposure. NOx also contribute to oxygen deprivation of lakes and coastal waters which is destructive to fish and other animal life.

Sulfur Dioxide (SO<sub>2</sub>) 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 atm osphere to form acid rain, which raises the acid level of lakes and streams, and accelerates the decay of buildings and monuments.