# NEW/HAMPSHIRE electric co-op TODDAY OCTOBER 2017 YOUR ELECTRIC CO-OP'S NEWSLETTER

### THE FUTURE IS ELECTRIC THE SWITCH IS ON FROM FOSSIL FUELS TO ELECTRICITY

A typical passenger vehicle emits about 4.7 metric tons of carbon dioxide per year, according to the U.S. Environmental Protection Agency. Similarly, more than 5 million homes in the Northeast United States burn an average of 645 gallons of home heating oil every winter. Imagine replacing those gas-fired cars with zero-emissions electric vehicles (EV) and those furnaces with electric heat pumps, which are three times as efficient and produce no emissions. Electricity will continue to replace fossil fuels in the coming years. This "beneficial electrification" is a cornerstone of NHEC's plans for the future.

### Who Benefits?

In short, we all do. The widespread electrification of highly efficient space heating, water heating and transportation benefits:

- Co-op members by reducing overall energy costs
- The environment by reducing fossil fuel and carbon emissions
- The Co-op itself by increasing electricity sales and supporting the costs of the distribution system

As part of NHEC's Strategic Plan, we will be pursuing and promoting the transition from fossil fuel to electricity as a way to help our members and ensure the sustainability of NHEC in a time of rapid industry change.

### WATTS HAPPENING

### Vehicles and Equipment Up for Bid

NHEC will be accepting bids for vehicles and equipment that are being retired from the fleet. Only Co-op members, employees and retirees may submit bids. See the *News & Events* section of our website for information about the vehicles and equipment being auctioned, as well as viewing and bid dates. Please note that Member Solutions representatives cannot answer questions regarding vehicles and equipment being disposed.

## Won't Increased Electricity Demand Produce More Greenhouse Gas Emissions?

Not necessarily. Electricity producers are relying less on fossil fuels and adding more and more renewable energy sources to their production. That's a trend that is projected to continue over time as states impose mandatory renewable energy requirements and clean energy rivals fossil fuels for cost and availability. For instance, only 13 percent of the electricity that NHEC purchased for use by our members in 2016 was generated by oil and coal. The rest came from cleaner sources like nuclear, natural gas and renewable resources.

#### We've Already Started

NHEC has incentive programs in place to help you transition from fossil fuels to efficient electric alternatives.

- EV Rebates up to \$1,000 when you purchase a qualified plug-in EV
- High Efficiency Heat Pump rebates up to \$1,000 per ton (12,000 BTUs) on the purchase of qualified heat pumps for space heating and cooling. Low interest financing options are available
- Heat Pump Water Heater rebates up to \$600

To learn more about these and other NHEC programs, visit www.nhec.com, or call 1-800-698-2007.

Winter Rates Are Topic of October 25 Telephone Town Hall The upcoming November 1 electric rate change will be the topic of a Telephone Town Hall Meeting to be held on October 25 at 6:30 p.m. NHEC makes periodic outbound calls to members to discuss topics that affect you. We'll call you on October 25 and invite you to stay on the line to listen in.

#### **Board of Directors Meetings**

The NHEC Board of Directors regularly meets on the last Tuesday of each month at the Cooperative's office at 287 Highland Street in Plymouth. Please check the Board of Directors page on the Co-op web site at www.nhec.com, or call Sharon Yeaton at (603)536-8801 to confirm the current month's time and location.

### New Hampshire Electric Cooperative, Inc. Co-op Power Resources Information - 2016

Electric providers are required by the New Hampshire Public Utilities Commission to provide customers with an environmental disclosure label with information to evaluate services offered by competitive suppliers and electric utilities, and to provide information about the environmental and public health impacts of electric generation. Further information can be obtained by calling NHEC (800-698-2007) or your competitive electric supplier, or by contacting the Public Utilities Commission. Additional information on disclosure labels is also available at www.puc.nh.gov or at www.nhec.com.

Link to PUC website: http://www.puc.nh.gov/Consumer/Environmental%20Disclosure%20FAQs.html

	Power Source	NHEC's Co-op Power			New England
Power Sources		Known Resources	System Power	Total	Regional Average
NHEC's 2016 Co-op Power was generated by the following sources:	Biomass	0.79%	0.02%	0.81%	3.57%
	Coal	0.00%	3.09%	3.09%	2.44%
	Hydro	1.22%	0.20%	1.42%	5.07%
	Imported Power	0.00%	22.07%	22.07%	16.51%
	Landfill Gas	2.51%	0.00%	2.51%	0.94%
	Municipal Trash	0.00%	0.12%	0.12%	2.57%
	Natural Gas	0.84%	42.65%	43.49%	32.64%
	Nuclear	0.00%	10.19%	10.19%	24.16%
	Oil	0.01%	10.98%	10.99%	7.70%
	Geothermal/other	0.02%	0.00%	0.02%	0.06%
	Solar	0.29%	0.02%	0.31%	1.32%
	Wind	4.96%	0.01%	4.97%	3.01%
	Total	10.6%	89.4%	100.0%	100.0%

#### Air

Air Emissions			Average
Carbon dioxide (CO2),			Ŭ
nitrogen oxide (NOX), and	SO2	137%	
sulfer dioxide (SO2) emission			
rates from the above sources	NOX	99%	
compared to the regional			
average.	CO2	103%	

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 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. Electric suppliers are required to obtain a certain amount of renewable energy in accordance with RSA 362-F, the state's renewable portfolio standard law. They may also choose to obtain amounts of renewable energy above their legal obligation, and utilities offer a renewable energy option to allow customers to choose to support the purchase of additional renewable energy by the utility. NHEC purchases much of its power from wholesale suppliers, some of whom retain their lower emission resources for their own compliance and reporting, which increases emissions content of the System Power they offer for sale. The percentage of generation fueled by coal and oil in the System Power used by the Co-op is relatively higher than for the New England Region, and the higher levels of SO2 and CO2 emissions from the Co-op power sources reflect this aspect of the market.

Emissions: Carbon Dioxide (CO2) is released when fossil fuels (e.g., coal, oil and natural gas) are burned. CO2, a greenhouse gas, is a major contributor to climate change.

Nitrogen Oxides (NOx) 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 (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.

For member service please call

1-800-698-2007

Monday-Friday, 8-5:00 or visit us online at www.nhec.coop



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