POWER YOUR KNOWLEDGE

Watts, volts, kilowatts. Understanding how the energy that we use is measured can be confusing. Here are some explanations to help make sense of energy use.

- **CAPACITY (OR PEAK):** The highest level of electricity can be supplied at any one time. For residential customers, capacity is measured in kilowatts (kW). Peak demand on the electricity system is measured in megawatts (MW).

- **ENERGY (OR CONSUMPTION):** The total amount of electricity can be supplied throughout the year. In the home, the amount of energy used is measured in kilowatt-hours (kWh). The quantity of power produced by a generating station over a period of time is measured in megawatt-hours (MWh).

- **GIGAWATT HOUR (GWh):** One billion watt hours or one million kilowatt-hours. A measure of electricity usage by homes and businesses. The energy supplied to all customers is measured in gigawatt-hours.

- **KILOVOLT (kV):** One thousand volts.

- **KILOWATT (kW):** One thousand watts; the commercial unit of measurement of electric power. A kilowatt is the flow of electricity required to light ten 100-watt light bulbs.

- **KILOWATT HOUR (kWh):** One thousand watts used for a period of one hour; the basic unit of measurement of electric energy. The average electrically-heated home on the island of Newfoundland consumes about 18,200 kWh per year.

- **LOAD:** The amount of electricity required by a customer or group of customers.

- **LOAD FORECAST:** The expected load requirements that an electricity system will have to meet in future years.

- **MEGAWATT (MW):** One million watts or one thousand kilowatts. A unit commonly used to measure both the capacity of generating stations and the rate at which energy can be delivered.

- **TERAWATT HOURS (TWh):** A unit of bulk energy; 1,000,000,000 kilowatt hours.

- **VOLTAGE AND VOLTS:** The pressure pushing a number of electrons (current) along a transmission or distribution line is called the voltage, which is measured in volts.

- **WATT:** A derived unit of power. Watts measure the rate of energy conversion.