



Glossary of Technical Terms

Air Cooled Generators – generators that rely on airflow to cool the engine. They can be portable or permanently installed ranging in size from 4kW to 20kW.

Ampere (amps) – a unit of electric current. Most household circuits are 15 or 20 amps. Appliance or equipment circuits are 20 amps and higher.

Automatic Standby Generator – a back-up electrical system that operates whether you are at home or away. It automatically supplies power to the essential circuits of your home within seconds of a utility outage. After utility power returns, the generator shuts itself off and awaits the next outage. It operates on natural gas and is located outside just like a central air conditioning unit.

Automatic Transfer Switch (ATS) – an electrical device that automatically switches the electrical load from a utility (normal) power source to an emergency (standby) power source and vice versa. The transfer switch prevents electrical feedback between the two power sources.

BTU (British Thermal Unit) – a measure of how much (volume) gas a generator or appliance requires to operate as designed.

Circuit Breaker(CB) – an electrical device that acts as a switch and automatically protects an electric circuit from overload or short circuit. Typically the ampere (amp) rating is noted on the handle.

Circuit Breaker Panel (load center) – an electrical enclosure that can contain up to 42 circuit breakers.

Decibel (dB) – a unit of measure for sound. It allows for the comparison of known values for different levels of noise generated by various means.

Double Pole Circuit Breaker – a circuit breaker that supplies a 240 volt circuit. It physically is the size of two single pole circuit breakers and can have a single handle or bar joining the two individual handles. They usually provide power to large appliances and equipment such as air conditioners, well pumps, electric ranges and dryers.

Estimate – an approximate cost. The actual cost is unknown, until completion of a project, which is a disadvantage to the consumer.

Kilowatt (kW) – a watt is a basic unit of power, whereas a kilowatt is 1000 watts (equal to 10-100 watt light bulbs). Generators are rated in kW as an industry standard for sizing and comparison.

Liquid Cooled Generator – a class of generators 22 kW and larger that utilize an automotive type engine due to the increased horsepower required. These engines produce more heat and require liquid cooling just like your automobile does.

Liquid Propane (LPG- LP) – a gas that is compressed to form a liquid, for easy transport. The liquid vaporizes as it is released from the pressurized tank or bottle. It is heavier than air or natural gas. It also has a higher energy content than natural gas as evidenced by the higher power (kW) rating of a generator.



Load Shedding – disconnecting electrical loads to prevent overloading of a generator. A Load Shed Controller performs this function automatically.

Manual Transfer Switch – a mechanical device that manually switches the electrical load from a utility (normal) power source to an emergency (standby) power source and vice versa. The transfer switch prevents electrical feedback between the two power sources.

Natural Gas – is a gaseous fossil fuel consisting primarily of methane. It is delivered to homes and businesses through a distribution network of underground pipelines. It is sold in units called therms; 1 therm = 100,000 BTU. Nicor is the local supplier in the Chicagoland area.

Portable Generator – transportable generators that are flexible in meeting temporary power needs. They are more affordable than a standby generator and range in sizes from 4kW to 15kW. They are louder than a standby (since they are not in an enclosure) and require refueling during operation.

Prompt.Diligent.Done. – on time/as scheduled, accurate /intentional effort, complete/no return trips required.

Quotation – a firm price for a specific scope of work, it becomes our promise to you. This is an advantage to the customer, since the full cost is known **before** approving the work.

Single Pole Circuit Breaker – a circuit breaker that supplies a 120 volt circuit. It has a single handle and the ampere (capacity) rating is noted directly on the handle or face.

Surge Amps – the starting amperes that a motor or appliance requires during the first few seconds of start-up. When sizing a generator, the generator surge capacity must be greater than the surge amperes of the load.