The Australian Power Institute POWER ALPHABET



The unit of electric current.



Frequency:

The number of cycles per second in an alternating current (AC) signal, measured in Hertz (Hz).



Busbar:

An electrical conductor used to collect and distribute power between incoming and outgoing feeders.

Generator:

A device that

converts

mechanical energy

into electrical

energy.



Harmonics:

Distortion in power systems occurs due to voltage or current components that are multiples of the fundamental

frequency.



Capacitor:

A device used to store electrical energy temporarily in an electric field.



Insulator:

A material that resists the flow of electric current, used to support and separate conductors.



Distribution:

Delivering electricity from transmission to consumers.



Efficiency:

The ratio of the useful power output to the total power input.



Joule (J):

A unit of energy, equivalent to one watt of power expended for one second.



Kilovolt (kV): A unit of electric

potential equal to 1.000 volts.



The amount of power consumed by devices or systems.





A unit of power equal to one million watts.







Substation:



The unit of electrical resistance.



Transformer:

An electromagnetic

device that transfers

electrical energy between

circuits.



Power Factor:

The ratio of real power to apparent power in a circuit.









The component of current or voltage 90 degrees out of phase with the reference waveform relates to reactive power.

Voltage:

The electric potential difference between two points, measured in volts (V).

Energy sources naturally replenished, like solar and wind.

Watt (W):

The unit of power,

equal to one joule per

second.

Renewables:

A facility in the power transmission system that reduces high-voltage electricity to a lower voltage for consumer distribution.

X-Factor:

Do you have the xfactor to make it in the power industry?

Y-Connection:

Connecting three-phase electrical systems with each phase linked to a common neutral point.

Determining the most cost-effective power generation units to meet demand.



Impedance (Z):

The total opposition to the flow of alternating current, combining resistance and reactance, measured in ohms.