

The New Reactive-Power Charge and Mandatory Hourly Pricing

What You Need to Know Now, and Why

Reactive Power and Power Factor – Terms You Need to Know

To better understand reactive power and power factor, it helps to review basic electric concepts and terms.

Most of our country's electricity is generated, transported, and used in an alternating current (AC) system. This system produces and uses two types of power — real power and reactive power.

Real Power

Real power actually does the work. It runs motors, lights lamps, etc., and is measured in kilowatts (kW).

Reactive Power

Reactive power doesn't "do" the work, but is needed to magnetize motors, transformers, and relays so they start and operate. It is measured in thousands of volt-amperes-reactive (kVAR). Utilities, such as Con Edison, must build and maintain infrastructure capable of carrying real power as well as reactive power.

Apparent Power

Apparent power is made up of real and reactive power, and is measured in thousand volt amperes (kVA).

Power Factor (PF)

Power factor is the ratio of the real power to the apparent power in a circuit. The closer a system's power factor is to one, the more efficient the system is.

Inductive Loads

Inductive loads are electrical devices, such as motors and certain kinds of lighting, that use current to create a magnetic field that produces the desired work.