

WHAT IS DEMAND (KVA)?

Electricity consumption (kWh) measures the volume of power consumed over a given period of time. Demand (kVA) measures the maximum average amount of power consumed over a short increment of time (like an hour) for a set period - typically a month or year. See Image 1.

Demand (kVA) charging helps recoup the costs of infrastructure, enabling it to handle peak loads. Australian peak loads typically happen for around two weeks of summer. While solar power dilutes these summer peaks during the daytime, after the sun starts lowering on hot summer days, air-conditioning, refrigeration and water pumping are still generally working at their maximum.

HOW DEMAND (KVA) IS CHARGED

Demand (kVA) is typically measured over a smaller 'average time frame' over an hour. This peak demand over a longer time frame (a month or year), is then used as the measure to apply the charge rate to.

Power supplied to a site by distributors is generally measured in kVA. But power consumed is kWh. The difference is lost power, referred to as kVA_r. A business fix for this is called a power factor correction unit (PFC).

All energy consumers will need to get familiar with demand (kVA) charging. It's likely to appear on all future electricity tariffs offered by retailers.

DIFFERENCE BETWEEN CONSUMPTION AND DEMAND

IMAGE 1

Electricity use profile sample

