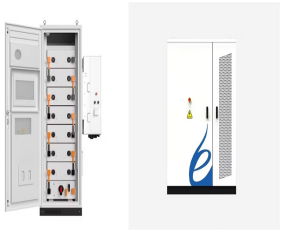
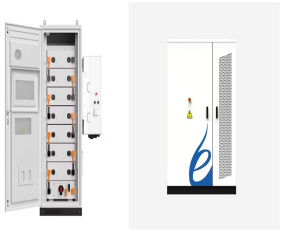
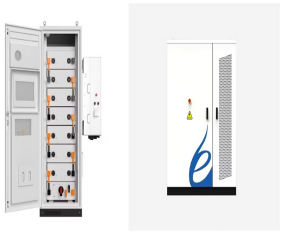
ENERGY STORAGE ON-DEMAND ELECTRICITY CHARGES



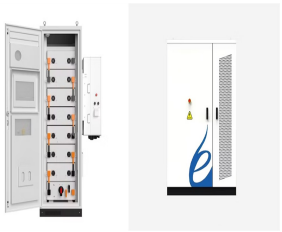
What is a demand charge? Unlike residential consumers, who are charged primarily for their kWh (energy) consumption, larger electricity consumers must also pay demand charges on a kW (power) basis. To calculate the demand charge of a facility, the utility notates the highest average 15 minute period during a billing cycle.



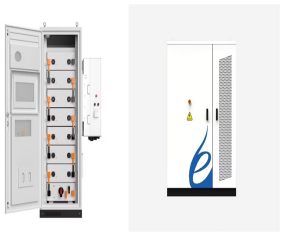
How is a demand charge calculated? To calculate the demand charge of a facility,the utility notates the highest average 15 minute period during a billing cycle. This is a surcharge on top of standard kWh rates and often times is a substantial portion of the total bill. To illustrate how a demand charge works consider the following examples:



What if demand charges are high? If the demand charges are high enough,the next step is to pull usage interval datafrom the customer's meter (s). Your Account Manager will help you assess demand charge mitigation and aid you in the sizing of the solar system,battery bank and battery inverters.

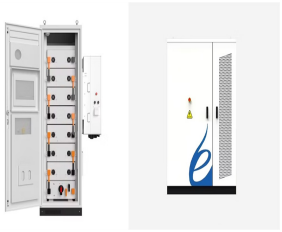


Why do utilities charge for energy? It is obvious why utilities charge for energy; it is a service provided over time that consumes fuel and other resources. Utilities must also charge large electricity consumers for demand (power). This charge represents the physical generation capacity required to be kept online to meet peak events.

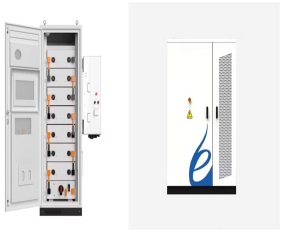


How does energy storage affect peak power? with static energy and supply costs,energy storage tends to decreasethe peak power of the community. An exception to this is the sacrificial discharging phenomenon seen in the PSC tariff,where storage systems intentionally discharge to better align with later opportunities; This peak power increase comes due to electricity exports.

ENERGY STORAGE ON-DEMAND ELECTRICITY CHARGES



Why does a utility charge a large electricity consumer? Utilities must also charge large electricity consumers for demand(power). This charge represents the physical generation capacity required to be kept online to meet peak events. There is significant value in knowing that if all of the factories in a service area turn on their equipment at once,the utility will be able to support their activities.



This tariff structure includes the DNSP residential demand rates. Note that service providers may choose to impose a seasonal variation. In the example below, this is shown as the summer and winter demand charges. ???

For those subject to a demand charge electric rate, reducing overall electricity usage during peak periods is the only way to lower their electric bill. By storing excess energy in batteries during ???

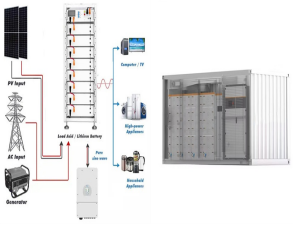
Electric customers with the greatest power requirements pay for their share of capacity. It's not uncommon for commercial customers to have demand charges comprise over 50% of their total electric bill. Similar to ???

Transition to a world without fossil fuel requires 100% deployment of renewable resources such as solar and wind in conjunction with thermal energy storage (TES) to produce ???

ENERGY STORAGE ON-DEMAND ELECTRICITY CHARGES

Introduction. Electricity demand is not constant and generation equipment is built to serve the highest demand hour, even if it only occurs once per year ().Reference Booth 1 Utilities help meet this peak demand by ???

Demand Charge vs Energy Charge. Electrical energy charge is determined by the total electricity consumption measured in kilowatt-hours (kWh) over the billing period. Your meter tracks both on-peak and off-peak energy ???



The impact of energy storage costs on renewable energy integration and the stability of the electrical grid is significant. Efficient battery energy systems help balance the supply and demand of solar and wind energy. ???

The use of electric energy storage is limited compared to the rates of storage in other energy markets such as natural gas or petroleum, where reservoir storage and tanks are used. Global capacity for electricity storage, as of September ???

Chemical energy storage systems convert electrical energy into chemical energy. This practice facilitates energy buying and selling. Lithium-ion batteries; Flow batteries for large-scale demand management; 4. Electrical ???

ENERGY STORAGE ON-DEMAND ELECTRICITY CHARGES

Battery Energy Storage System (BESS): Batteries can store energy when demand on the electric grid is low and release it when demand is high. A BESS is the most direct and flexible strategy for achieving peak shaving. Start your ???