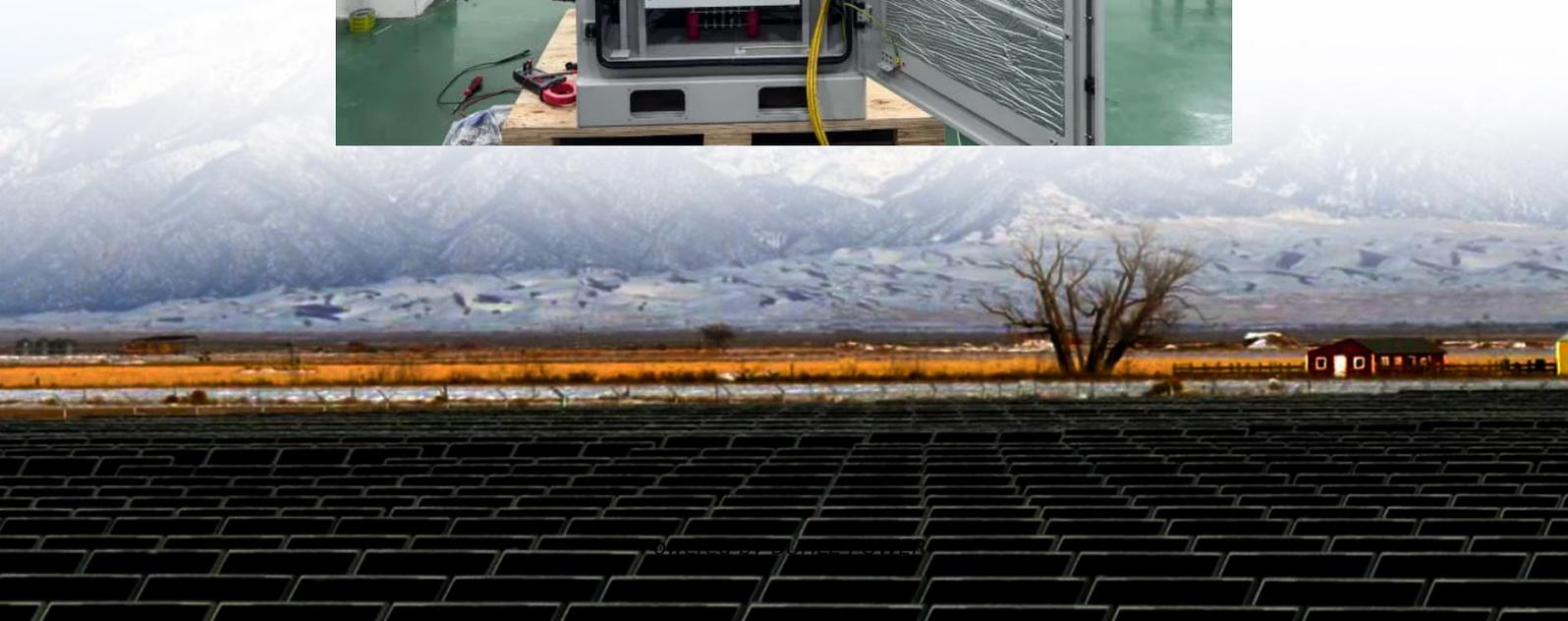


Peak-to-valley difference of solar container energy storage system





Overview

Peak shaving refers to reducing electricity demand during peak hours, while valley filling means utilizing low-demand periods to charge storage systems. Do energy storage systems achieve the expected peak-shaving and valley-filling effect?

Abstract: In order to make the energy storage system achieve the expected peak-shaving and valley-filling effect, an energy-storage peak-shaving scheduling strategy considering the improvement goal of peak-valley difference is proposed.

Can decentralised energy storage reduce peak load?

Decentralised energy storages can reduce the overlarge peak load value and peak-valley difference of distribution lines. In a low load period, decentralised energy storages can store power and consume the power output of PVs. In a peak load period, decentralised energy storages release stored energy to supply power to each node load.

What happens if energy storage is not allocated?

Among them, in case 2, energy storage is not allocated, which cannot reduce the peak value and peak-valley difference of the high-voltage inlet line of trans-former stations, so the safe and stable operation of the utility power grid cannot be guaranteed.

What is the energy storage strategy?

The strategy includes the allocation of centralised energy storage in transformer stations, the allocation of decentralised energy storage on lines and the upgrading of distribution lines.



Peak-to-valley difference of solar container energy storage system



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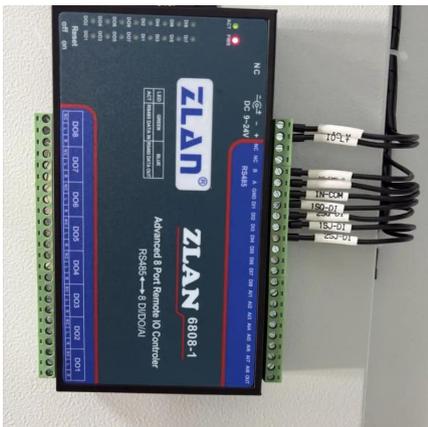
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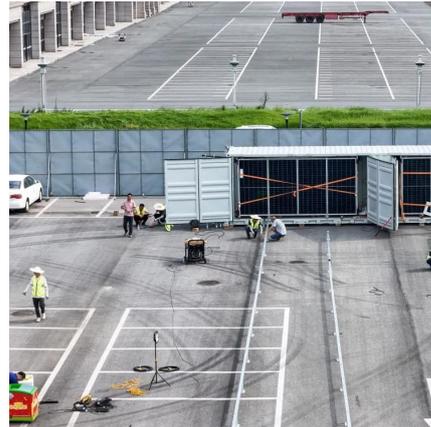
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