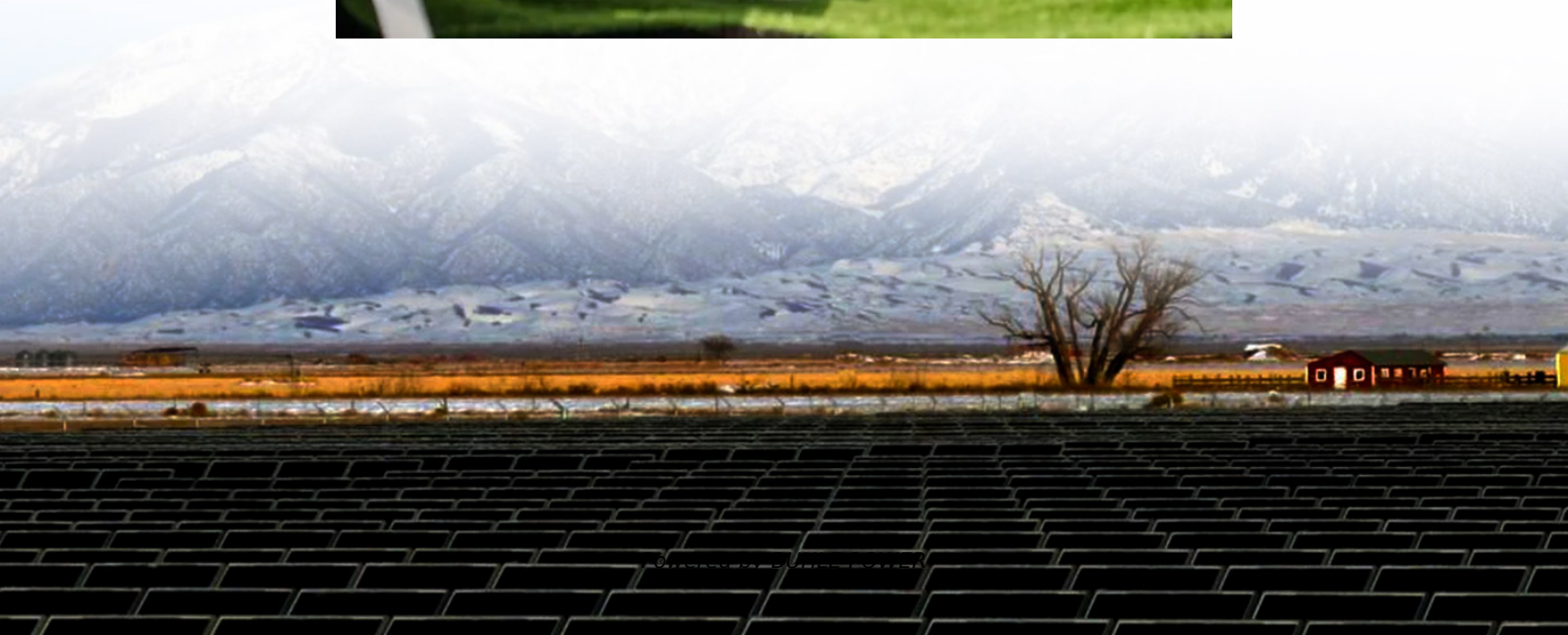


Base station power operation





Overview

What is the energy saving strategy of base station?

In [20], the energy saving strategy of base station is proposed considering the variability and complementarity of base station communication loads. This strategy helps the power system to cut peaks and fill valleys while reducing base station operating costs.

What is the power of a base station?

The corresponding powers of different operating states are 2.3 kW, 3 kW, 3.5 kW, and 4 kW, respectively. The nominal capacity of the base station energy storage is 20 kWh, and the number of the base station in each operating state is 500. The SOC values of the base station obey normal distribution between 0 and 1 in each operating states.

What is the purpose of a base station?

The structure of base station provides conditions for energy storage to assist in power system frequency regulation. Although the power output of a single base station storage is limited, the combined regulation of large-scale base stations can have a significant meaning.

What is the primary responsibility of the base station energy storage?

The primary responsibility of the base station energy storage is to protect the power supply of the base station, so the dynamic backup capacity of the base station in real time will be considered in the future. Chen, X.; Lu, C.; Han, Y.: Power system frequency problem analysis and frequency characteristics research review.



Base station power operation



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Energy Flow Analysis and Fr Ability of A Single 5G Base Station
Fr Potential of Aggregated 5G Base Stations
Feasibility Analysis
There are two types of 5G base stations: macro-base station and micro-base station. A micro-base station covers small space and consumes little energy. On the contrary, a macro-base station consumes more energy and covers wider space than micro-base station. Therefore, macro-base station has a greater FR potential, and this paper focuses primarily See more on link.springer Oxford Academic



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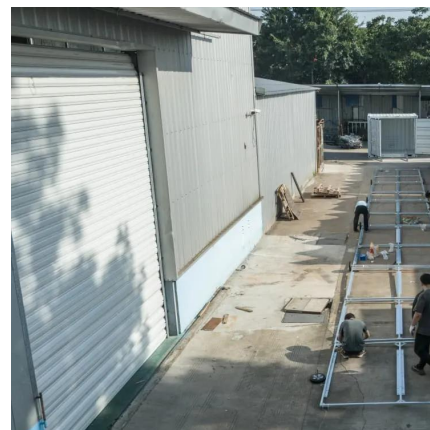


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