

China Southern Power Grid Peak Regulation and Frequency Regulation Energy Storage





Overview

How to evaluate peak-regulation capability in Chinese power grid?

A visualization method of evaluating peak-regulation capability is proposed. Effective clustering method reduces the number of unit on-off state combinations. Two typical peak-regulation problems in Chinese power grid are analyzed. Four measures are discussed to enhance the peak-regulation capability.

What is peak-regulation capability of a power grid?

Principle of the evaluation method The peak-regulation capability of a power grid refers to the ability of power supply balancing with power load, especially in the peak load and valley load periods. Specifically, the adjustment range of power supply in one day should be high enough to reach the peak load and low enough to reach the valley load.

What is peak-regulation market mechanism in Northeast China Grid?

For market mechanisms, the deep peak-regulation market has been constructed in Northeast China Grid to cope with the peak-regulation capacity shortage issue (Ma et al., 2019). The peak-shaving auxiliary service market mechanism was established considering both the source-side and demand-side resources (Yang et al., 2021).

What is peak-regulation capability?

Also, the peak-regulation capability determines the renewable energy consumption and power loads of cities by mitigating power output fluctuation in the regulation process of power grid.



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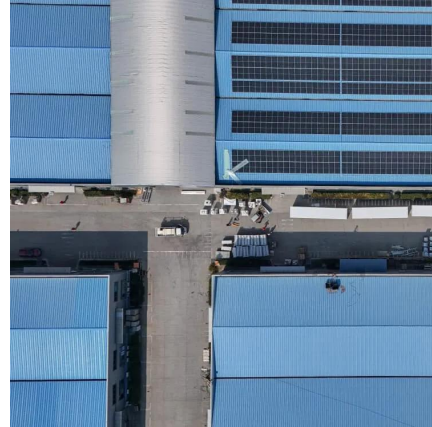


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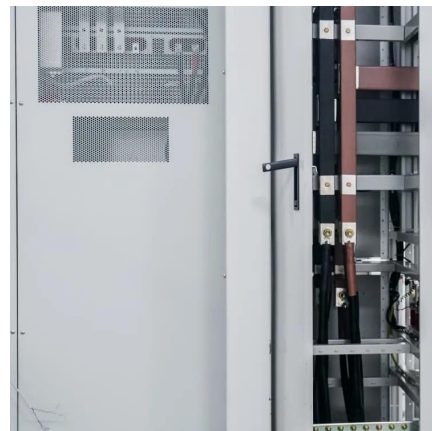
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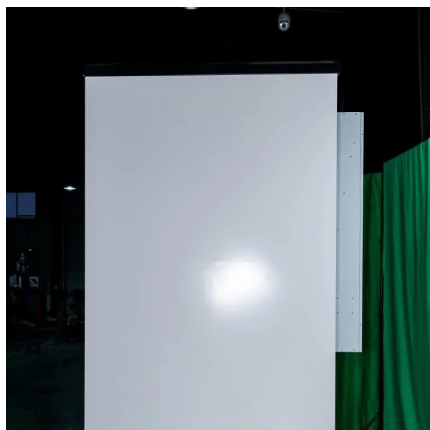
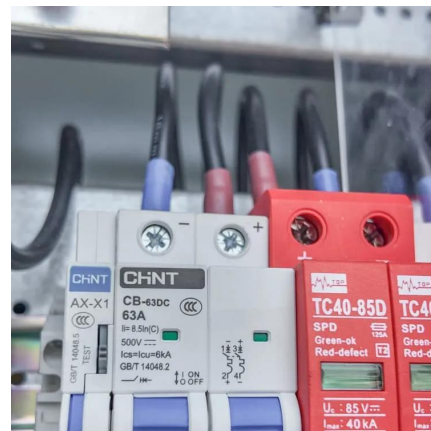


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