

Energy storage peak-shaving power station construction





Overview

Why is peak shaving unbalanced?

Due to the cost of deep peaking of conventional units, the system needs a larger charging power provided by ES to participate in peak shaving when the power of RE is larger (e.g. Fig. 7 (Typical day 3 0:00 to 8:00 p.m.)). In this way, the charge and discharge of ES involved in peak shaving may be unbalanced.

What are the advantages of energy storage?

The unique advantages of energy storage (ES) (e.g., power transfer characteristics, fast ramp-up capability, non-pollution, etc.) make it an effective means of handling system uncertainty and enhancing system regulation [, ,].

What is es peaking power correction?

4.2.1. Energy storage power correction During peaking, ES will continuously absorb or release a large amount of electric energy. The impact of the ESED on the determination of ES capacity is more obvious. Based on this feature, we established the ES peaking power correction model with the objective of minimizing the ESED and OCGR.

Why is Zhejiang's pumped storage power station important?

The pumped storage power station in Zhejiang is not only a major project requiring intensive technology and capital, but also a critical measure in transforming the energy structure and promoting green, low-carbon development, said Zhu Gongshan, chairman of GCL Group.



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Review of Optimal Allocation and Operation of Energy

Key words: energy storage system, peak shaving and frequency regulation, optimal allocation, collaborative operation, control strategy, new type power system

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