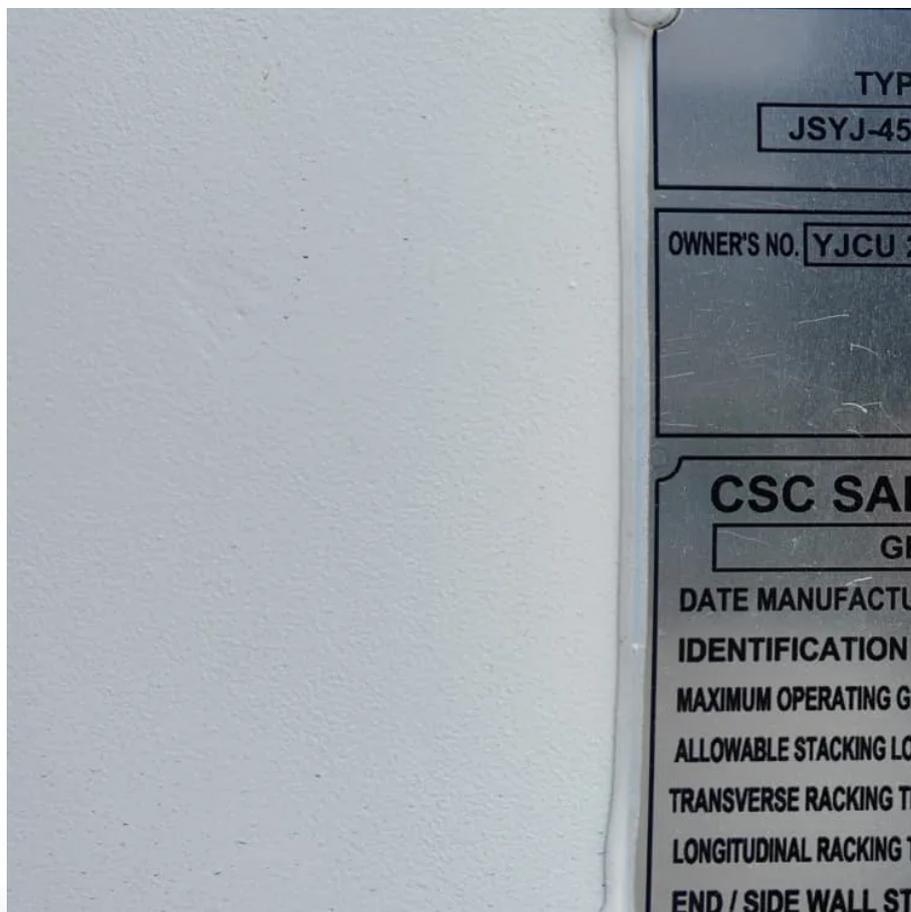


Feasibility of wind and solar energy storage power stations





Overview

How to optimize energy storage capacity in wind-solar-storage power station?

Based on the actual data of wind-solar-storage power station, the energy storage capacity optimization configuration is simulated by using the above maximum net income model, and the optimal planning value of energy storage capacity is obtained, and the sensitivity analysis of scheduling deviation assessment cost is carried out.

What are the benefits of energy storage systems?

The introduction of energy storage systems enables internal compensation of power generation from renewable energy sources within the station, enhancing the stability of output power and improving the ability to track the power generation scheduling curve. This allows the station to actively participate in power system scheduling.

What is a battery energy storage system (BESS)?

To overcome these challenges, battery energy storage systems (BESS) have become important means to complement wind and solar power generation and enhance the stability of the power system.

How does configuration capacity affect net income of a wind-solar-storage power station?

It can be seen from the figure that when the configuration capacity changes, the net income of the wind-solar-storage power station shows a trend of increasing first and then decreasing. There is a maximum point of net income, and the corresponding configuration capacity is 2.84 MWh.



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