

Title: Capacity of wind-solar hybrid power generation system

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We optimized the solar system using the conventional Perturb and Observe (P & O) method and the metaheuristic Particle Swarm Optimization (PSO) technique. Our primary ...

A capacity allocation model of a multi-energy hybrid power system including wind power, solar power, energy storage, and thermal power was developed in this study.

ia's annual solar energy is equivalent to more than 5000 trillion. This study examined the influence of the following variables on the final decision: batteries and wind turbines, the number of PV ...

To address this challenge, this article proposes a coupled electricity-carbon market and wind-solar-storage complementary hybrid power generation system model, aiming ...

The results show that integrating EH can improve the stability of the output power and reduce the curtailed wind power of the wind-CSP hybrid system, and bigger EH capacity ...

Behzadi and Sadrizadeh (2023) proposed a multi-energy complementary system of wind-solar-hydrogen to optimize the system capacity configuration, reduce the peak ...

This article aims to evaluate the optimal configuration of a hybrid plant through the total variation complementarity index and the capacity factor, determining the best amounts of ...

Results show that the PV plant with an inverter can generate power at the lowest cost but with poor reliability. The combination of the CSP plant and PV plant is an effective ...

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