
Low-carbon economic dispatching strategy based on feasible region of cooperative interaction between wind-storage system and carbon capture power plant Guangzheng Yu a, ...

Abstract: In this paper, we use an evolutionary swarm intelligence approach to build an automatic electric dispatch controller for an offshore wind power plant (WPP).

Firstly, this paper introduces the composition and function of each unit under the research framework and establishes a joint dispatch model for wind, solar, hydro, and thermal ...

In this paper, a novel hierarchical model predictive control (HMPC) strategy based on dynamic active power dispatch is proposed to improve wind power schedule and increase ...

This paper proposes an active and reactive power dispatch method for a wind farms (WF) considering the real-time service quality and the available power to achieve the ...

In this paper, the day-ahead optimal dispatching model of power system that is combined by wind-photovoltaic-hydropower-thermal-pumped storage is esta...

Mentioning: 7 - Due to high wind power penetration into power system, synchronous generators may no longer be the dominant generation, which implicitly requires participation of wind ...

Aiming at the problems of large-scale wind and solar grid connection, how to ensure the economy of system operation and how to realize fair scheduling between new energy ...

Inverter-based intermittent resources like wind and solar power are quickly adjustable only to reduce their output (curtailment) relative to their production limit at any given time, which is ...

Simulation results show that the proposed dispatch model can effectively strengthen wind power absorption, ensure secure operation, and improve the robustness of ...

Ref [19] presented a multi-stage RO model to enhance the economic efficiency of the system and mitigate the impact of wind power fluctuations on real-time economic dispatch.

The book is the first of its kind to provide readers with a comprehensive reference that includes the solution codes for basic/advanced power system optimization problems in GAMS, a ...

Leveraging this surrogate model, a short-term WPP dispatch framework is developed, ensuring both precise dispatch command tracking and the preservation of FRS capabilities. Additionally, ...

This paper proposes a hybrid-driven active power control strategy for large-scale wind farm (WF) that integrates data-driven and model-driven approaches to optimize power ...

This paper presented a decentralized dynamic system for power optimal dispatch in WFs, designed to suppress voltage deviations while tracking and responding to power ...

We propose an optimal dispatch WPP controller, in which appropriate parameter settings of the algorithm are obtained automatically over time so that its performance is ...

Due to high wind power penetration into power system, synchronous generators may no longer be the dominant generation, which implicitly requires participation of wind ...

Heat storage (HS) instalment in combined heat and power (CHP) plants is a promising solution to increase the adjustability of CHP plants and reduce renewable energy ...

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