

Title: Wind power generation overvoltage

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As China pursues its "carbon peak" and "carbon neutrality" goals, the rapid growth of renewable energy has raised concerns about grid stability due to transient overvoltage. The ...

The paper is devoted to the development of a device for protecting facilities with turn-to-turn insulation, namely transformers and wind generators in...

Drawing upon the fundamental frequency equivalent circuit of wind power systems, an analysis is conducted to derive the mechanisms dominating the temporary overvoltage in grid ...

Reference (Abdelkader et al., 2023) combines Model Predictive Control (MPC) with Superconducting Magnetic Energy Storage (SMES) devices and improved wind power generation ...

Based on frequency security and transient overvoltage limitations, the paper proposes a parameter optimization method for wind power support control. Initially, convolutional neural network ...

The reasons for overvoltage at the generator end and the influence of cable distribution parameters on overvoltage are analyzed; Secondly, conduct theoretical calculations; Finally, ...

The classification of overvoltage. Topology and control block diagram of a grid-connected PMSG-based wind power generation system. Block diagram of PMSG with low-voltage ride-through ...

For the first time, this standard incorporates 6kV-66kV transformers for new energy generation (photovoltaic, wind power, energy storage) into mandatory energy efficiency regulations, ...

To suppress transient overvoltages of DFIG terminals and PCC, an adaptive overvoltage control strategy based on data-driven approach is proposed. With the control strategy, reactive ...

In regions with extensive wind power collection, the grid's robustness diminishes, and transient overvoltage

phenomena during the restoration phase following an AC short-circuit fault ...

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