Intelligent control of wind power generation system

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This scholarly paper offers a wind power generation system (WPGS) that utilizes a configuration of parallel five-phase permanent magnet synchronous generators (PMSGs).

To ensure precise estimation of reactive power at the point of connection (POC), a coordinated control scheme with accurate parameter calculations, considering system ...

This paper introduces a novel hybrid controller designed for a wind turbine power generation system (WTPGS) that utilizes a permanent magnet synchronous generator (PMSG).

Next-generation wind turbine control systems are evolving with intelligent automation, predictive monitoring, and grid-aware design to drive efficiency, resilience, and ...

The contribution of this paper, motivated by the existing works, consists of proposing an intelligent control for increasing maximum generation power efficiency of a VSWT.

In this paper, a critical issue related to power management control in autonomous hybrid systems is presented. Specifically, challenges in optimizing the performance of energy sources and ...

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