

عنوان مقاله:

Smart Control Design to improve Low-Voltage Ride-Through Capability of Wind Turbine

محل انتشار:

بیست و هفتمین کنفرانس بین المللی برق (سال: 1391)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Hamed HeydariDoostabad - Department of Electrical Engineering, Semnan University

Reza Keypour

Naser Eskandarian

خلاصه مقاله:

This letter proposes an optimal control to improve low voltage ride through capability of fixed speed wind turbine that is connected to Grid and STATCOM device, and compares two kinds of robust control such as H-infinity and mixed of Htwo and H-infinity to improve the rate of fault clearing and uncertainty of test system. This work focuses on the development of advanced optimization and intelligent control algorithms to improve the stability, reliability and dynamic performance of WTGs, FACTS devices, and the associated power networks. The proposed optimization and control algorithms are validated by simulation studies in MATLAB/Simulink. Results show that they significantly improve electrical energy security, reliability and sustainability.

کلمات کلیدی:

Grid Code, Optimal Control, Robust Control STATCOM, Uncertainty, Wind Turbine

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/178148>

