Abstract

Global warming as one of the most critical environmental problem facing by the whole world. In an attempt to prevent the realization of these fears, numerous advanced nations around the world have committed themselves to controlling emissions of greenhouse effect gases by becoming signatories to the Kyoto Protocol. Wind energy is a clean energy that can avoid greenhouse gas (GHG) emissions and emits no air pollution. As wind turbine generators are
driven by fluctuating wind, the power quality of the system gets when they are installed into the electric grid. This paper present a control scheme for maintaining power output stability of wind power by using Matlab/ Simulink. A current source inverter (CSI) has been used as a controller for controlling the output voltage and electromagnetic torque of the system. Three resistances are also connected in parallel to the load for the protection of over current in the system. Squirrel-cage type induction generator and Self-excited induction generators are also simulated with the controller.

References

- U. S. Energy Information Administration, International Energy Outlook
- P. S. Georgilakis, "Technical challenges associated with the integration of wind


**Index Terms**

Computer Science  

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**Keywords**

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